

Exploring Cultural, Social and Psychosocial Influences
on Women's Drinking across Age Cohorts

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Abstract

Research on alcohol consumption indicates an increase in women's levels of alcohol consumption (ABS, 2012a; AIHW, 2008, 2014) and are more at risk than men of detrimental physical, medical, social and psychological effects of high levels of alcohol consumption (Epstein, Fischer-Elber, & Al-Otaiba, 2007). Yet to date limited research has been conducted on female-specific drinking and much of this research has focussed on younger women (Epstein et al., 2007; Griffin, Umstattd, & Usdan, 2010; Livingston, Testa, & Windle, 2012). Further, research has shown that the factors affecting drinking behaviours can range from broad cultural influences (Grønkjær, Curtis, Crespigny, & Delmar, 2011; Roche et al., 2008) through to intra-individual psychosocial influences (Bogart & Delahanty, 2008; Livingston et al., 2012; Measham & Brain, 2005; Szmigin et al., 2008). Hence, the current programme of research aimed to: identify key factors associated with women's drinking across a wide age range (i.e., 18 to 87 years); and examine women's drinking through complementary lenses that allowed exploration of multiple systems of influence (cultural, social, and psychosocial). This research programme used a mixed methods design to qualitatively draw upon the experiences of women, to then explore and identify influencing factors, and finally to understand the salience of such factors, and potential relationships between them, through a large scale quantitative study.

The mixed methods design was comprised of an initial inductive approach (Phase 1) using qualitative methods and guided by Bronfenbrenner's Bioecological Model of Human Development (BMHD) (Bronfenbrenner and Morris, 2006). The subsequent deductive phase (Phase 2) applied the Theory of Planned Behaviour (TPB) (Ajzen, 1991) in a quantitative study ($N = 1069$) in order to substantiate factors influencing women's alcohol consumption. Phase 1 was comprised of Study 1 (the observations and document analysis) and Study 2 (the semi-structured interviews). Phase 2 was comprised of Study 3 (the quantitative survey). The theoretical approaches that informed this research were

chosen on the basis of a review of the literature and the qualitative findings of Stage 1. The BMHD provided a broad framework consistent with the multiple system of influence on alcohol consumption identified within existing literature. The TPB (Ajzen, 1991) provided a lens for examining the specific psychosocial influences on women's drinking.

Study 1 comprised of two concurrent studies, observations and a document analysis, which provided rich descriptions of women's drinking behaviours in their natural drinking environments. Seven field observations of women that consumed alcohol in public drinking venues were conducted. A document analysis in the form of analysing online media (e.g., websites, venue marketing, social media) which pertained to each venue or event observed, served as a form of triangulation. The findings from Study 1 showed that a drinking event incorporated influences that filtered from wider cultural and social systems through to it affecting the behaviours of women. Consistent with the BMHD (Bronfenbrenner & Morris, 2006), connections were evident between: cultural influences (culturally defined gender roles, national identity, and cultural celebrations); exosystem influences (media, marketing, legislation and policy); microsystem influences (venue policy and marketing, peer influences, and microsystem celebrations), and then psychosocial factors observable at an individual level (changes in behaviour and consumption).

To gain a more comprehensive understanding of the influences on women's drinking across a range of ages, Study 2 was comprised of interviews with women aged 18 to 55 years old. Study 1, in conjunction with existing empirical evidence, provided a firm basis upon which to develop the semi-structured questions which guided the interviews in Study 2. One hour semi-structured telephone interviews ($N = 35$) were conducted with women residing in Australia. The thematic analysis that was undertaken using the constant comparative method (Boeije, 2002; Glaser & Strauss, 1967), revealed evidence of alcohol consumption being embedded in many facets of Australian life. Consistent with the BMHD (Bronfenbrenner & Morris, 2006), influences were found to arise from various

levels including cultural (e.g., gender roles, national identity), exosystem (e.g., infrastructure, legislation), microsystem (e.g., social networks), psychosocial (e.g., implicit social acceptance, identity, attitude, intention, mindfulness), and at a chronosystem level (e.g., changes across the life span). Although factors at all system levels were found to be important influences on women's drinking behaviours, the interview data (Study 2) revealed that proximal factors were more salient to the women than distal factors. The interview data also highlighted several themes that aligned with the TPB that warranted further investigation. Hence in Phase 2, the quantitative phase (Study 3) was comprised of a survey that was based upon an extended TPB model.

The survey which formed the basis of Study 3 enabled the examination of the TPB constructs together with the extended constructs of self-identity and awareness as predictors of drinking-related intentions and behaviours. In addition, responses to the survey also enabled the examination of the critical beliefs underlying women's drinking. The survey utilised a prospective design, wherein women ($N = 1069$) aged 18 – 87 years completed a questionnaire measuring their intentions to consume alcohol, and then two weeks later completed a follow-up ($N = 845$) questionnaire reporting their engagement in low risk drinking, frequent drinking and binge drinking.

Chapter 9 reports the results of regressions examining the direct predictors of intentions to, and subsequent engagement in, the two risky behaviours of frequent drinking and binge drinking through the application of an extended TPB model, including awareness and self-identity. Hierarchical multiple regressions supported the predictive utility of the standard TPB, which explained between 26% and 52% of the variance in intentions to engage in frequent drinking and binge drinking, respectively. Awareness of one's drinking was a negative predictor of intentions to engage in both drinking behaviours, and self-identity was significantly and positively associated with intentions to binge drink. Age was a positive predictor of intentions to engage in frequent drinking and a negative predictor of intentions to binge drink. Income was a negative predictor of

intentions to binge drink. Logistic regressions found that intentions and Perceived Behavioural Control (PBC) explained 55% and 38% (Nagelkerke R^2) of self-reported frequent drinking and binge drinking, respectively. Hence, this analysis supported the predictive utility of the extended TPB which included awareness of drinking and self-identity in determining women's intentions to consume alcohol.

Chapter 10 presents the examination of the extent to which underlying beliefs in relation to alcohol consumption predicted intentions to engage in low risk drinking, frequent drinking and binge drinking. A series of ANOVAs was conducted to examine the effects of age (grouped as 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 years and above) on women's intentions to engage in low risk drinking, frequent drinking and binge drinking. Significant effects of age were found in relation to intentions to frequent and binge drink. Based upon the TPB, critical beliefs analyses were carried out to identify key determinants that were underlying the intentions to engage in the three different drinking behaviours. The critical beliefs analyses revealed that a number of behavioural, control, and normative beliefs were significant predictors of intentions. These beliefs varied according to age group and drinking behaviour. Identification of the underlying beliefs as a function of age group and drinking behaviour provided important information that may be used to support the development of tailored interventions.

Overall, the current programme of research contributed significantly to the understanding of multiple systems of influence on women's drinking across a range of age cohorts. These findings also added to the literature with regard to the utility of the BMHD (Bronfenbrenner & Morris, 2006) and the TPB (Ajzen, 1991) in providing distinct lenses for explaining factors influencing women's drinking. Further, the results indicated a need to target prevention and intervention at distinct levels of influence and to tailor intervention strategies for different ages to minimise future alcohol-related problems and facilitate early intervention for women at risk of alcohol-related harm.

List of Submitted Manuscripts

Haydon, H.M., Lewis, I., Obst, P.L., & Armstrong, K. (Submitted). Women's drinking across the life span: A qualitative exploration of cultural, social, and psychosocial influences.

Haydon, H.M., Obst, P.L., & Lewis, I. (under review). Predicting women's alcohol consumption: The Theory of Planned Behavior, self-identity and awareness.

Haydon, H.M., Obst, P. L., & Lewis, I. (under review). Women's intentions to consume alcohol: A critical beliefs analysis.

Conference Proceedings and Presentations

Haydon, H. M., Obst, P. L., Lewis, I. M., & Armstrong, K. A. (2013) Bioecological factors influencing women's alcohol consumption across the life span. In *British Psychological Society, Division of Health Annual Conference*, 11-13 September 2013, Holiday Inn, Brighton, UK.

Haydon, H. M., Obst, P. L., Lewis, I. M., & Armstrong, K. A. (2013) Exploring cultural, social and psychosocial influences on women's drinking across the life span. In *20th International Conference on Alcohol, Drugs and Traffic Safety: Conference Proceedings*, Brisbane Convention and Exhibition Centre, Brisbane, QLD.

Notes

Manuscripts based on Chapters 7 to 10 have been submitted for publication and are either awaiting review or currently under review. All manuscripts are submitted to peer-reviewed international journals listed in the Social Science Citation Index and recognised for the DEST publication collection.

The candidate is the first author on all submitted manuscripts. The subsequent authors are all members of the candidate's supervisory team and their contribution to the manuscripts has been of a supervisory nature. Permission has been granted by all co-authors for the inclusion of the manuscripts in this dissertation.

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Statement of Original Authorship

The work contained in this thesis has not been submitted previously to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

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Glossary of Abbreviations

| | |
|--------|--|
| ABS: | Australian Bureau of Statistics |
| AIHW: | Australian Institute of Health and Welfare |
| AUDIT: | Alcohol Use Disorders Identification Test |
| BMHD: | Bioecological Model of Human Development |
| LSAC: | Longitudinal Study of Australian Children |
| NDSHS: | National Drug Strategy Household Survey |
| NHMRC: | National Health and Medical Research Council |
| NRL: | National Rugby League |
| NSW: | New South Wales |
| TPB: | The Theory of Planned Behaviour |
| WHO: | World Health Organization |

Chapter 1 – Increasing Trends of Women’s Drinking and Female-Specific Risks

(Scoping the problem and the rationale for the research)

1.1 Background

The National Drug Strategy 2010-2015 reports the need to address excessive consumption of alcohol as a major cause of health and social harms in Australia (Ministerial Council on Drug Strategy, 2011). Research indicates that a high proportion of women are consuming alcohol at risky levels (Australian Bureau of Statistics, [ABS], 2009b; 2009c, 2012a), which is of concern as women are particularly vulnerable to alcohol-related harms (World Health Organization [WHO], 2014). Further, recent data indicate that this risky drinking behaviour¹ is not just confined to the younger female population, but is also apparent in older female age groups (ABS, 2006, 2009b, 2012a; Australian Institute of Health and Welfare [AIHW], 2008; 2005; Measham & Ostergaard, 2009; Roche et al., 2008). Research suggests that women’s drinking behaviour is distinct from their male counterparts’, and that distinct cultural, social and psychosocial influences may be associated with risky drinking in the female population (Allamani, 2008; Corzine, 2010; Measham & Ostergaard, 2009; Roche et al., 2008). However, little research on such influences on women’s drinking has been conducted. Hence the current programme of research

¹ According to the Australian national guidelines to avoid lifetime risk of alcohol-related harms, it is suggested that an individual drinks no more than two standard drinks on any day (NHMRC, 2009). Single occasion risk is defined in the Australian guidelines as drinking more than four standard alcoholic drinks on any single occasion (NHMRC, 2009).

focussed on exploring the cultural, social and psychosocial factors that influence women's alcohol consumption across a wide range of ages (18 years and over).

1.2 The need to conduct research into women's alcohol consumption

There have been rapid and substantial changing trends in women's alcohol consumption over the last twenty years, which have not been matched by relevant research into those changing trends. For instance, the Australian Bureau of Statistics (ABS; 2006) data show that between 1995 and 2005 the proportion of females who consumed alcohol at risky / high risk levels had almost doubled. Further, research into the quantity and frequency of alcohol consumption indicates that women today are drinking more than any previous generation (AIWH, 2005; Roche et al., 2008). After controlling for age, there was a significant increase, between 2001 and 2007-08, in women consuming alcohol at risky levels. Furthermore, the increases that took place between 2001 and 2004-05 indicated that women's risky drinking was up by 3.2% points (ABS, 2012). It is well documented that women have different patterns of alcohol consumption and different risks compared with men (ABS, 2009c; Lindsay, 2006; Roche et al., 2008; Rubin, Stout, & Longabaugh, 1996). For instance, there is a dip in the proportion of women drinking at risky or high risk levels between the ages of 25 to 34 years (Figure 1) (reported as those women of child-bearing age) (ABS, 2009c). This dip is absent from the profile men's drinking (ABS, 2009c). Further, the alcohol-related harms that women are exposed to when drinking at risk levels encompass a range of physical, social and psychological effects (Epstein et al., 2007) which can be a function of single occasion risk (e.g., sexual assault) (Epstein et al., 2007; F. Hutton, 2004; Testa & Livingston, 2009) and long-term risk (e.g., breast cancer) (National Health and Medical Research Council [NHMRC], 2009; Wang et al., 2014). Research has also highlighted that women are more likely to progress faster

in developing alcohol dependence compared with men (Carroll et al., 1999, p. 253; Kay, Taylor, Barthwell, Wichelecki, & Leopold, 2010, p. 140). As such, alcohol consumption can be considered a gendered activity with different behaviours, influences and outcomes for men and women (Roche et al., 2008).

A 2009 ABS report shows an anomaly in the proportion of women drinking at risky or high risk levels between the ages of 18 years and 55 years (ABS, 2009b), where there is an apparent dip in the proportion of women drinking at risky or high risk levels between the ages of 25 to 34 years (Figure 1). The ABS (2009c, p.3) states

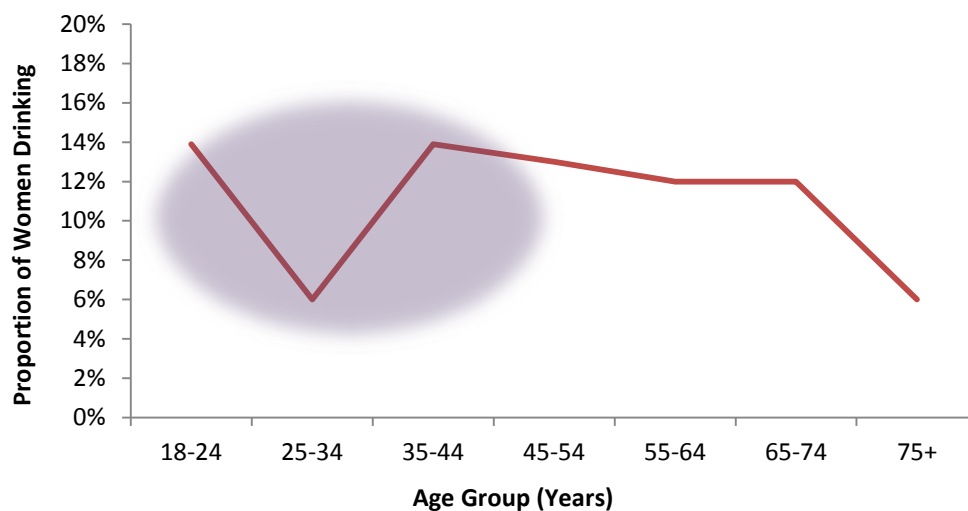


Figure 1. Proportion of women in Australia drinking at risky and high risk levels (ABS, 2009b, p.2; 2012)

that “For women, the proportion drinking at risky and high risk levels sat generally around 12% for most age groups with a dip for those in their prime childbearing years, aged 25-34 years (9%)”. More recently, ABS (2012) data show that the levels of risky and high risk drinking were up as far as 14% for women in the age groups 18-24 years and 45-54 years. Hence, research to facilitate understanding of this trajectory is vital.

1.3 Risks Associated with Women's Drinking

There is evidence to suggest that women are at higher risk than men for detrimental physical, social and psychological effects of at-risk alcohol consumption (Epstein et al., 2007). Further, many studies indicate that women's drinking behaviour exposes them to increased or different levels of risks because of their gender, such as risky sexual practices, violence, sexual assault and drink spiking (Epstein et al., 2007; H. E. Hutton, McCaul, Santora, & Erbeling, 2008; Matheson, 2008; Taylor, Prichard, & Charlton, 2004; Testa & Livingston, 2009). Australian data show that it is not just different short term risks that women are exposed to, but also women's life-time risk of alcohol-related disease increases more quickly compared with men (NHMRC, 2009). Hence the research evidence points to a need to examine women's alcohol consumption in order to reduce exposure to such alcohol-related risks.

1.4 Summary of Major Research Gaps

Broadly speaking, there are three major research gaps that have been identified in the literature concerning women's alcohol consumption. First, the vast majority of previous research has focussed on young, male drinkers or young people in general (Allamani, 2008; Matheson, 2008; Measham & Ostergaard, 2009) and little research has been conducted specifically on women's alcohol consumption. Second, studies that examine women's drinking have predominantly focussed on younger female populations (Griffin et al., 2010; Leyshon, 2008; Lindsay, 2006; Livingston et al., 2012) to the exclusion of older female populations. This gap is a critical one given that recent data suggest that risky drinking in this older demographic is becoming an emerging issue (ABS, 2006, 2009b, 2012a; AIHW, 2008, 2014). Finally, research that includes drinking behaviours in older female populations has been conducted from the perspective of a single level of influence only (e.g., cultural factors, such as class,

feminine identity, women's societal roles; or more proximal factors, such as the psychosocial function of alcohol).

The gaps in the existing research reveal a need to build a more comprehensive picture incorporating multiple levels or systems of influence on women's alcohol consumption and related behaviours. Hence, there is a need to examine how cultural, social, and psychosocial factors relate with each other and influence the alcohol consumption of women of a range of ages in order to address the recent changes in women's drinking behaviours. Bronfenbrenner's Bioecological Model of Human Development (BMHD; Bronfenbrenner & Morris, 2006) has been used as a health behaviour model that incorporates multiple systems of influence on behaviours (Ayoola, Nettleman, & Brewer, 2007; Bogg & Finn, 2009; Corcoran, Franklin, & Bennett, 2000) and, as such, was used in the current programme of research, as an overarching organisational framework² that acknowledges the existence of multiple systems of influence. The following section will summarise these broad research gaps in more detail.

1.4.1 Studies of women's drinking

Recent evidence indicates a number of key considerations in regard to women's drinking including: changing trends in women's drinking (ABS, 2012a); women's drinking is distinct from men's drinking (Epstein et al., 2007; NHMRC, 2009); and that women of all ages have significant risks associated with their drinking behaviours (H. E. Hutton et al., 2008; Wang et al., 2014); yet there has been limited empirical research conducted to examine the underlying influences on these female-

² Please note that throughout this thesis the terms 'framework' and 'model' are used interchangeably.

specific drinking trends. Most research into alcohol consumption has focussed on male and youth populations and hence, explanatory frameworks are built from information about these populations (Allamani, 2008). A small number of studies demonstrate a relationship between women's alcohol consumption (and the feminisation of drinking (Lindsay, 2006)) and the evolving nature of women's societal roles (Allamani, 2008; Lindsay, 2006). However, there is a need for gender-specific research addressing a broad range of influences on women's drinking in order to provide a current and gender relevant depiction of an emerging phenomenon (Allamani, 2008; Dijkstra, Verdonk, & Lagro-Janssen, 2008; Rudolfsdotir & Morgan, 2009).

Such research identifying key influences on women's drinking can be aligned with interventions and specifically used to guide gender-specific interventions. Hence, one of the key aims of this current programme of research was to focus on a specifically female sample (aged 18 years plus) to explore any female-specific influences not explained by previous research. A key aspect of this current research is examining women's attitudes and behaviours regarding alcohol and the potential factors which may be influencing such attitudes and behaviours. Women's changing roles in society have meant that their drinking behaviours have changed in that their drinking has been shown to be increasing (Roche et al., 2008). As such, there is a need to investigate influences on the way in which women, specifically, engage in drinking behaviours with the view of targeting potential gender-specific influencing factors.

1.4.2 Key influences on the alcohol consumption of women across age groups

Women aged 40 to 49 years are more likely to engage in risky drinking behaviour than men are in this age group (AIHW, 2008). Hence, not only are younger women drinking at risky and high risk levels, but so too are women in the middle age

group (ABS, 2009b, 2009c, 2012a; Roche et al., 2008). Of particular concern is evidence that women, compared to men, are more at risk for detrimental physical, medical, social and psychological effects of at-risk consumption (Epstein et al., 2007). In order to mitigate such risks, a deeper understanding of the influences that affect the alcohol consumption behaviours of women of different ages is needed. These gendered patterns of drinking behaviour suggest that distinct influences may underpin women's drinking behaviours in comparison to their male counterparts'.

Extant literature highlights variations between the influences on women and men's drinking as a result of: cultural variations in the meanings that women and men attribute to drinking behaviour particularly with regard to the way in which men and women perceive alcohol-related risks (Mullen, Watson, Swift, & Black, 2007); the interplay between gender roles and drinking behaviours (Conroy & de Visser, 2013b; de Visser & McDonnell, 2012; Huselid & Cooper, 1992) and how genetic factors significantly influenced men's consumption patterns yet women's patterns were more influenced by social factors (Jang & Livesley, 1997). Hence, the available research evidence indicates that there are differences in the factors which influence gendered consumption patterns. However much of this research is focussed on younger cohorts or does not focus purely on women's drinking. In particular little is known about the influences on women's alcohol consumption in the older age groups. Hence, considering the changing trends in consumption and the increase in older women's risky drinking, further research is warranted in order to examine key influences on drinking behaviour of women aged 18 years and above, thus encapsulating the two key at-risk age groups of younger and older women (see Figure 1).

1.4.3 Multiple systems of influences on women's alcohol consumption

Increasingly, research recognises the importance of cultural and social influences as a contributing factor to drinking behaviour (Gordon, MacKintosh, & Moodie, 2010; Grønkjær et al., 2011; McCutcheon, Lessov-Schlaggar, Steinley, & Bucholz, 2014; Roche et al., 2008). Additionally, the psychological processes underlying decision-making around such drinking behaviours have been examined at an intra-individual level (Aarons, Goldman, Greenbaum, & Covert, 2003; Lindgren, Foster, Westgate, & Neighbors, 2013). Yet, there is little investigation into the reasons underpinning women's drinking, accentuating the need for exploring the social meanings that women in contemporary Australian culture attribute to their consumption.

Measham and Ostergaard (2009) observed that an understanding of the cultural, social and psychosocial aspects of women's drinking from a female perspective is needed. While existing research highlights the importance of cultural factors (Roche et al., 2008); distal social factors (e.g., media, alcohol marketing, governmental policy) (Measham, 2004b; Measham & Shiner, 2009; L. A. Smith & Foxcroft, 2009); or more proximal social factors (e.g., peers, partners) (Larsen, Engels, Granic, & Overbeek, 2009; Leonard & Homish, 2008) on people's, predominantly young people's, drinking behaviours, it does not address how these factors may influence women's drinking more specifically. Further, much of the literature around alcohol consumption is primarily focussed on just one level of influence (e.g. cultural or intra-individual; Fielder, Donovan, & Ouschan, 2009; Glindemann, Wiegand, & Geller, 2007; Gullo, Dawe, Kambouropoulos, Staiger, & Jackson, 2010; Hughes et al., 2011; Sheehan & Ridge, 2001).

Bronfenbrenner's BMHD (Bronfenbrenner & Morris, 2006) has been used as a health behaviour framework, one which incorporates multiple systems of influence on

behaviours (Ayoola et al., 2007; Bogg & Finn, 2009; Corcoran et al., 2000). These different systems of cultural and social influence as well as chronological influences (e.g., applicable to intergenerational changes in women's drinking or changing alcohol-related influences as a function of age) are indicated in the research literature as pertinent when describing their impacts upon alcohol-related attitudes and behaviours. Yet little research addresses these multiple systems of influence. Hence, emerging trends in women's drinking behaviour, in conjunction with previous empirical evidence outlining multiple levels or systems of influence, elicit a need to examine women's alcohol consumption as a function of multiple systems of influence (e.g., cultural, social and psychosocial).

1.5 Research Scope

Within a psychological framework, this research aimed to acknowledge the important influence of culture as reflected in the research (discussed below), but it is beyond the scope of this research to focus on specific cultural ideologies. Thus, this research aimed to examine women's drinking through taking both a broad social cultural lens and a narrower psychosocial lens to identify the key influences that affect the alcohol consumption behaviours of women of a range of ages. Adult women, 18 years and older, were examined in order to identify any patterns of factors impacting on women's drinking behaviours. The rationale to include participants in this age range was in order to capture current experiences of women of different ages and ostensibly at different stages of life to examine whether cultural, social and psychosocial influences are impacting upon their alcohol consumption and associated behaviours. The focus of the current research project was on adult women who are over the legal drinking age in Australia (18 years) and excluded under-aged female drinkers. Underage drinking introduces a number of complexities that were beyond the

scope of the current thesis (e.g., It is illegal to consume alcohol when under 18 years old in Australia). The focus on adult women allowed for an in-depth exploration of the factors associated with older women's alcohol consumption and little researched population (AIHW, 2014). It thus represented an important contribution to the literature in that this focus addressed a gap in understanding given that this population has previously been the focus of limited research attention.

1.6 Thesis structure

Chapter 1 has just presented the rationale for the current programme of research by outlining the need to examine women's alcohol consumption as a result of the increasing trends in risky drinking across women of all age cohorts and the associated long and short term risks that accompany such drinking. In view of this need to examine women's drinking, chapter one also presented a summary of three major research gaps that this current programme of research addresses, concluding with the outlining of the scope of the research project.

Chapter 2 presents a review of the literature that examines factors that have been found to be associated with alcohol-related harm in the general population. The chapter highlights how the empirical evidence points to multiple systems of influence from broad cultural influences through to more proximal and psychosocial factors. Chapter 3 then outlines how two theoretical perspectives, the BMHD (Bronfenbrenner & Morris, 2006) and the Theory of Planned Behaviour (TPB; Ajzen, 1991) can provides frameworks to support an examination into multiple systems of influence on women's drinking across age cohorts.

Chapter 4, then, provides an overview of the programme of research. This overview includes the rationale behind the two main phases of the research programme which comprised three studies. The aims and research questions for each

study are presented in this chapter (Chapter 4). Chapter 5 provides detail of the methodological approaches taken in the current programme of research. Chapters 6 to 10 present the results of the studies conducted in this programme of research. Finally, Chapter 11 presents an overall integration and synthesis of the findings from all of the studies across the programme of research. This final chapter also discusses how the current research programme contributes to existing theory, has implications for practice, acknowledges the strengths and limitation of the research, and provides suggestions for future research in this field.

Chapter 2 – Influences on Women’s Drinking (The Literature Review)

Chapter 1 outlined existing empirical evidence with regards to drinking behaviours, specifically highlighting the gaps within the literature that demand exploration of the influences on women’s drinking in light of the rising trends of women’s risky drinking. A thorough search of the literature was conducted to explore the following: drinking trends in Australia; a subsequent review of the literature regarding women’s alcohol consumption; influences on the general population’s consumption; and then a subsequent review of relevant theories. The current chapter provides a review of the definition of risky drinking and reviews the risks associated with high levels of alcohol consumption, and how these risks differ for men and women. It then provides a review of the research which examines factors shown to be associated with alcohol consumption and how such factors exist within different systems of influence from broader cultural influences to more proximal and psychosocial factors.

The current chapter also provides a comprehensive review of the existing literature on the risks involved in alcohol consumption, and the emerging trends in women’s alcohol consumption within the Australian context. The review will then demonstrate the potential importance of examining the influences on women’s drinking behaviour. Finally, the key social psychological theories that provided appropriate frameworks with which to explore and describe the relationships between influences and women’s alcohol consumption are discussed. Importantly, the literature review will highlight the unique contribution to be made by this research to the field of substance use and misuse and to women’s health and harm reduction.

2.1 Alcohol-related harms – General population

The association between alcohol consumption with a range of diseases that may cause death and adverse effects that reduce quality of life is well established (AIHW,

2008). Alcohol misuse poses a huge public health problem in Australia and elsewhere around the world (New South Wales Government, [NSW Government], 2004; Rehm et al., 2009; Room, Babor, & Rehm, 2005; WHO, 2005). According to the New South Wales Alcohol Summit held in 2004, approximately 3000 people were reported as dying and around 65 000 are hospitalised in Australia each year as a result of alcohol-related disease and injury (NSW Government, 2004). Annually, approximately \$AUD 7.6 billion is spent in Australia as a result of alcohol-related social problems. Globally, an estimated 3.8% of all deaths and 4.6% of disability-adjusted life-years is attributable to alcohol (Rehm et al., 2009).

Rehm and colleagues (2009) discuss how harm is closely related to the average volume of alcohol consumed, and that exposure to risk is more prevalent in certain populations. Table 1 presents consumption and risk exposure data in Australia according to the 2013 National Drug Strategy Household Survey (NDSHS) key findings report (AIHW, 2014). As Tables 1 and 2 show, the proportion of women drinking at risky levels increased between 2007 and 2010, but has started to decline or plateau for the most part. Recent declines may be due, in part, to the success of public health interventions, particularly those aimed at younger cohorts, of which there have been a number recently (Ballakoor et al., 2001; Corbin et al., 2013). However, Tables 1 and 2 indicate potential for improvement, with certain age cohorts continuing to show increases. For instance, the proportion of women aged 40 to 49, 50 to 59 and 60-69 who were exposed to alcohol-related single occasion risk at least weekly increased between 2007 and 2013. The proportion of women who drank at levels consistent with life time risks also increased for the cohorts aged 50 to 59 and 59 to 60 (AIHW, 2014). Further awareness and reduction of alcohol-related harms is necessary, especially with regards to these older cohorts.

Despite public health interventions targeting areas such as drink driving and restriction on alcohol availability to younger populations, there is substantial evidence calling for public health interventions having increased regulatory powers and better targeted at prevention (Livingstone, Moodie, & Tobin, 2011; Room et al., 2005; Treno & Lee, 2002). Whilst public health campaigns have raised awareness that Australia has problems with its alcohol consumption (Livingstone et al., 2011), and may have had some success in reducing or stabilising levels of alcohol consumption across the Australian population some specific populations', such as women's consumption, are increasing.

Table 1

NDSHS Key Alcohol Data (AIHW, 2014) - Proportion of women aged 12 years or older at risk of single occasion drinking*, 2007 to 2013 (per cent)

| Proportion of women aged 12 years or older at risk of single occasion drinking, 2007 to 2013 (per cent) | Weekly but not daily | | | Every day/ most days | | |
|---|----------------------|------|------|----------------------|------|------|
| | 2007 | 2010 | 2013 | 2007 | 2010 | 2013 |
| Age Group | | | | | | |
| 12–17 | 4.3 | 3.7 | 1.8 | 0.8 | 0.2 | 0.3 |
| 18–24 | 21.7 | 22.8 | 14.4 | 1.4 | 1.9 | 1.6 |
| 25–29 | 11.6 | 11.5 | 7.4 | 2.6 | 1.3 | 1.8 |
| 30–39 | 7.3 | 7.7 | 6.4 | 2.2 | 2.0 | 1.9 |
| 40–49 | 5.9 | 6.2 | 7.0 | 2.9 | 2.6 | 3.4 |
| 50–59 | 2.9 | 3.3 | 4.6 | 2.6 | 3.0 | 3.2 |
| 60–69 | 1.3 | 1.0 | 1.3 | 1.1 | 1.2 | 1.8 |
| 70+ | 0.4 | 0.5 | 0.5 | 0.9 | 1.0 | 0.7 |

* Single occasion risk is defined as more than 4 standard drinks on any one occasion

Table 2

NDSHS Key Alcohol Data (AIHW, 2014) - Proportion of women aged 12 years or older at risk of alcohol-related harm over a lifetime, 2007 to 2013 (per cent)

Proportion of women aged 12 years or older at risk of alcohol-related harm over a lifetime*, 2007 to 2013 (per cent)

| Age Group | 2007 (%) | 2010 (%) | 2013 (%) |
|-----------|----------|----------|----------|
| 12–17 | 4.6 | 4.0 | 1.7 |
| 18–24 | 20.2 | 22.1 | 14.6 |
| 25–29 | 14.4 | 12.9 | 9.8 |
| 30–39 | 12.3 | 11.4 | 9.3 |
| 40–49 | 13.7 | 12.9 | 13.5 |
| 50–59 | 11.2 | 12.1 | 12.3 |
| 60–69 | 8.4 | 7.7 | 8.6 |
| 70+ | 4.6 | 4.9 | 4.1 |

* Life time risk is defined as having, on average, more than 2 standard drinks per day.

2.1.1 Definitions of alcohol-related risk

Definitions and guidelines regarding risk and alcohol consumption have varied across time and across countries (C. A. Green, Polen, Janoff, Castleton, & Perrin, 2007; Gunzerath, Faden, Zakhari, & Warren, 2004). Presently, there is no international consensus regarding what level of drinking constitutes harmful drinking (Furtwängler & de Visser, 2012). When measuring alcohol consumption, its effects, and risks, not only how much an individual drinks has to be considered, but also how often, and over what period of time, the alcohol is consumed (Gunzerath et al., 2004). Individual differences in regard to genetics, age, tolerance, associated health issues and hence metabolism of alcohol are part of the biological variables that affect risks associated with consumption (Gunzerath et al., 2004), but also psychological and social factors are important to consider (Aarons et al., 2003; E. N. Peters, Khondkaryan, & Sullivan, 2012).

The current research, based on an Australian population, primarily discusses and defines alcohol-related risk according to two frames of reference: the Australian Alcohol Guidelines (NHMRC, 2009) and the Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993). The Australian Alcohol Guidelines (NHMRC, 2009) (See Appendix A) provides a framework of risk that is carried throughout the alcohol-related data in Australia. It contextualises alcohol-related risk in terms of drinking patterns and the associated risks of drinking on a single occasion and over the lifetime. The AUDIT (Saunders et al., 1993) is recommended as a reliable and valid screening tool by the World Health Organization (WHO) as it has been used extensively internationally (WHO, 2000). The AUDIT is a simple screening tool, with high reliability, which is sensitive to early detection of risky and high risk (or hazardous and harmful) drinking (Dawson, Grant,

Stinson, & Zhou, 2005; Knibbe, Derickx, Kuntsche, Grittner, & Bloomfield, 2006). It assesses consumption, drinking behaviour, dependence, and consequences or problems related to drinking (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001).

2.2 Women's consumption

2.2.1 Changing patterns in women's alcohol consumption

Recent Australian research indicates a decrease in the gap between men and women's risky drinking behaviours (AIHW, 2008; AIWH, 2005; Roche et al., 2008). After controlling for age, there was a significant increase, between 2001 and 2007-08, in men and women consuming alcohol at risky levels. The increases that took place between 2001 and 2004-05 saw women's risky drinking up by 3.2 percentage points and men's risky drinking up by 2.1 percentage points. After narrowing the gap in risky drinking, the rates observed in 2004-05 and 2007-08 were similar for both males and females (ABS, 2012a). The trends in women's alcohol consumption show substantial inter-generational changes toward increased alcohol-related risk (ABS, 2006, 2009b; AIHW, 2008; Roche et al., 2008). Women in two specific age cohorts (18 to 24 years old and 35 to 50 years old) appear to be the most at-risk groups (ABS, 2009b, 2009c, 2012a; AIHW, 2008, 2014). Between 2004 and 2007, the proportion of women in Australia that consumed alcohol on a weekly basis increased (AIWH, 2008). This finding is in comparison to their male counterparts' who showed a proportional decline in weekly drinking. Further, women in the 40 to 49 year age group were shown to be more likely to engage in risky drinking behaviour than men in this age group (AIHW, 2008).

For females, particular increases in risky and high risk drinking³ occurred between 2001 and 2007-08 for the age groups of 18-24 years and 55-64 years (up 5.1 percentage points and 4.2 percentage points respectively). In contrast, incidences remained more stable across 2001 and 2007-08 for females in their prime childbearing years (25-34 year olds), as well as those aged 35-44 years old (ABS, 2012).

For most age groups as presented within the ABS (2009b, 2012) data, overall, approximately 12.0% of Australian women are engaging in risky to high risk alcohol consumption, with the exception of women aged in the 25 to 34 years group where the percentage drops to 9.0% (ABS, 2009b). Reissued data (ABS, 2012a) suggest that the proportion of women drinking at risky and high risk levels was highest for age groups 18-24 years and 45-54 years (both 14.0%). Consumption risks in these age groups had increased significantly for both age groups since 2001: from 8.6% to 13.9% for the 18-24 years; and from 10.1% to 13.9%.

It is suggested that the drop to 9.0% in risky drinking in women aged from 25 to 34 years is related to fertility rates in this cohort (ABS, 2009a, 2009b). There is insufficient research discussing this drop and yet, this substantial change in the trend may be useful in understanding why women drink in the way that they do. If this pattern is representative of women of child-bearing age, this cohort has its own set of risks, with increased risk of unplanned pregnancies, unknown health risks to foetuses

³ These statistics are prior to the NHMRC 2009 guidelines, wherein the definitions of risky drinking changed. Prior to 2009, risky drinking for women is defined in terms of short and long term risk. Risky short term is 5-6 standard drinks and high risk short term is 7 or more drinks. In the long term risky is 3-4 standard drinks and high risk is 5 or more drinks.

and breastfed babies (Muggli, Cook, O'Leary, Forster, & Halliday, 2010; O'Leary, Heuzenroeder, Elliot, & Bower, 2007; Single et al., 2000; WHO, 2009). The latest National Health and Medical Research Council (NHMRC) guidelines (2009) recommend that women who are pregnant or breastfeeding should not consume any alcohol as many effects are unknown. However, recent research shows that 80% of pregnant women still consume alcohol during pregnancy despite these warnings (Powers et al., 2010).⁴ Considering the recent findings that demonstrate high risk is not only occurring among younger Australian women (ABS, 2008; AIHW, 2008), there is little research that specifically explores women's drinking. Further research on meanings that older women attribute to their drinking behaviours is needed. Epstein and colleagues (2007) recommend assessment on older women to investigate their exposure to alcohol-related risks, especially utilising screening tools such as the AUDIT (Saunders et al., 1993) which has been validated on older populations. The recent trends in consumption highlight the importance of an examination of factors influencing alcohol consumption as a function of age, as patterns and influencing factors may be quite distinct for women of different ages.

2.2.2 Differential risks of alcohol consumption for men and women

As previously mentioned, there is substantial evidence that women are at higher risk than men for detrimental physical, social and psychological effects of at-

⁴ Prior to October 2001 when guidelines recommended abstinence, 55% of the pregnant participants in Powers et al., (2010) research drank up to two drinks per day but less than 7 drinks per week. Of the 486 women interviewed, 25% considered having moderate intake with between 7 to 14 drinks per week or less than 7 drinks per week but more than two drinks per day.

risk alcohol consumption (Epstein et al., 2007). Research outlining the epidemiology of women's substance use emphasise the need for further examination into influences that may be gender specific and culturally defined (Matheson, 2008; Measham & Ostergaard, 2009). There is a need to examine alcohol consumption and alcohol-related problems specific to female drinking in order to reflect a more balanced understanding of drinking in today's culture (Allamani, 2008; Dijkstra et al., 2008; Rudolfstodir & Morgan, 2009).

Critically, many studies indicate that women's drinking behaviour expose them to increased or different levels of risks because of their gender, such as risky sexual practices, violence, sexual assault and drink spiking (Epstein et al., 2007; H. E. Hutton et al., 2008; Matheson, 2008; Taylor et al., 2004; Testa & Livingston, 2009). The World Health Organization (2009) released a fact sheet that outlines ten areas of risk that are more relevant to women than to men, even if women do not drink in excess (see Appendix B). For instance, inebriation, memory loss, brain damage and liver cirrhosis occur at a faster rate for women than men who drink the same amount for the same length of time.

A further difference pertaining to women's alcohol intake is associated with an increased risk of breast cancer for women (Beasley et al., 2010; Bissonauth et al., 2009; Dennis et al., 2011; R. G. Dumitrescu & Shields, 2005). For women, even moderate drinking levels are associated with breast cancer risks (Pirisi, 2000; Wang et al., 2014) and drinking patterns and associated beliefs can be predictive of later drinking behaviours that may be risky (Melo, Evans, Le Pollès, Delahunty, & Cox, 2012; Parks & Heller, 2013). Furthermore, for women who regularly consume alcohol at higher levels (i.e., > 2 standard drinks/ occasion), their risk of alcohol-related disease increases more quickly compared with men (NHMRC, 2009). Figure 2 shows

the 2002 Australian data for lifetime risk of alcohol-related deaths per 100 drinkers, by gender and number of standard drinks per occasion.

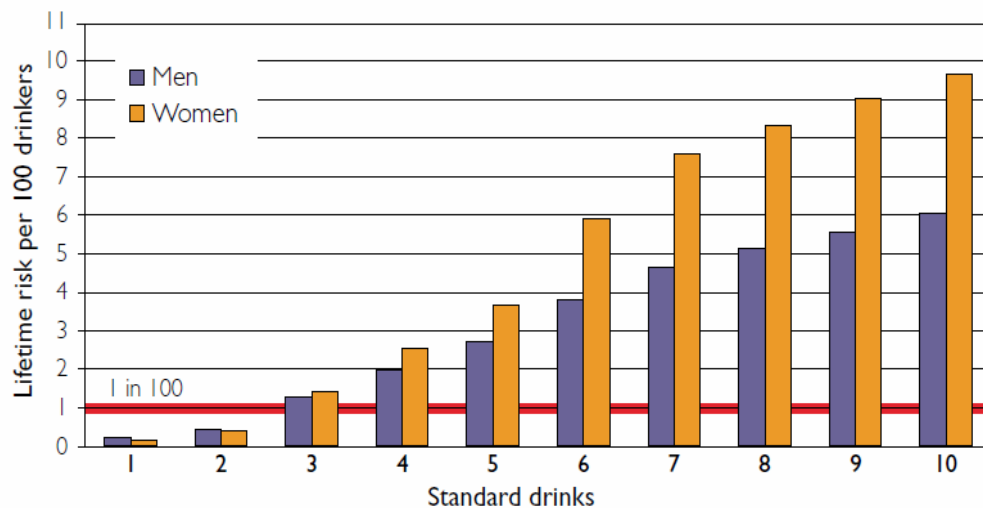


Figure 2. Lifetime risk of death from alcohol-related disease² per 100 drinkers, by number of standard drinks per occasion, Australia 2002 Source: NHMRC (2009, p.43)

These gendered patterns of drinking and subsequent risks bring about the question of differing reasons or influences behind the women’s drinking behaviours. Nolen-Hoeksema (2004) examined gender differences in risk factors and consequences of alcohol use, purporting that there is a “narrow window” of “safe drinking” for women, and emphasises the need to explore “cultural-by-gender interactions in drinking patterns” (p. 1000). Mullen, Watson, Swift, and Black (2007) provide evidence to suggest that one might expect some overlap between culturally influenced reasons that men and women give to their alcohol consumption, but variation between the sexes would also be expected. They found some common factors in young people’s drinking behaviour, but also distinct gender differences, such as the way in which men and women perceive alcohol-related risks. Huselid and Cooper (1992) describe the importance of gender roles in influencing alcohol consumption in young adults. Research examining the genetic influence of gender

differences on alcohol use found that whilst genetic factors significantly influenced men's consumption patterns, women's patterns were more influenced by social factors (Jang & Livesley, 1997). Roche et al. (2008) purport that cultural and social influences can determine the way in which people perceive and use alcohol and hence it is important to understand these influences as key targets for interventions. Conroy and de Visser (2013) and de Visser and McDonnell (2012) highlight the importance of the relationship between gender and alcohol consumption as they examined young men's drinking behaviours. Specifically, they discuss how decisions to abstain are perceived differently for men compared with women (Conroy & de Visser, 2013b) and in contrast, how, in contrast, women's engagement in drinking continues to be judged more harshly compared with men's (de Visser & McDonnell, 2012). Finally, drinking beer, binge drinking and intoxication continue to be perceived as masculine activities, with young people seeming to adapt their drinking behaviours in order to maintain a desired gender identity (de Visser & McDonnell, 2012). The available research evidence thus indicates differences in the factors underlying gendered consumption patterns and highlights the need to specifically examine cultural and social factors, associated with women's drinking behaviours.

2.3 Multiple Systems of Influence

The existing research, outlined below, describes social influences on an individual's alcohol consumption. It primarily examines cultural, social (distal or proximal) or psychosocial influences on young people's alcohol consumption. Although other research (including sociological and feminist perspectives) (Day, 2010; F. Hutton, Wright, & Saunders, 2013; Measham & Ostergaard, 2009; Szmigin et al., 2008) has been useful, there is presently little research, within a psychological framework, that addresses direct social influences on women's alcohol consumption

within the context of broader cultural influences. Cultural and social factors are enacted through a range of norms and normative behaviours. Many definitions and types of norms are referred to throughout this document and hence to guide the reader, Table 3 draws from the research literature to provide definitions of the norms and normative influences that are discussed in this current programme of research.

Table 3

Definitions Pertaining to Norms as Utilised in the Current Programme of Research

| | |
|----------------|--|
| Social norms | Standards within a social group regarding socially acceptable or appropriate behaviour in particular social situations. Social norms are defined by people's public behaviour, help establish expectations about how others will act and promote greater coordination in social interactions (Cialdini & Trost, 1998; D. A. Prentice & Miller, 1993) |
| Personal norms | Internalised standards of conduct that have been adopted as guides for one's own behaviour, as a result of normative influences, and often reflect a routine pattern of behaviour (Schroeder, 2010; Schwartz, 1973) |
| Cultural norms | Unwritten expectations that guide patterns of values, thoughts, assumptions, beliefs and feelings that have developed over time and are seen as the correct way to think, feel and act in relation to a particular action or challenge (Winzenreid, 2009). Pertaining to alcohol assumption, cultural norms relate to "rules a particular group uses for appropriate and inappropriate values, beliefs, attitudes and behaviours, are important in understanding people's alcohol use in a society." (Grønkjær et al., 2011, p.1) |

| | |
|---------------------|---|
| Sex-role norms | Social norms exert pressure and prescribe differential appropriateness and value of social behaviours for men and women. They create and maintain sex differences through a variety of mechanisms. (Wood, Christensen, Hebl, & Rothgerber, 1997) |
| Situational norms | Standards of expected behaviour within a specific setting. Situational norms represent generally accepted beliefs about how to behave in particular situations and are learned by associating normative behaviour to these situations (Aarts & Dijksterhuis, 2003). E.g., nightclubs A stability in patterns where certain times and occasions when drinking and drunkenness is appropriate. (Greenfield & Room, 1997) |
| Subjective norms | The extent to which important others are perceived as approving/disapproving of one's engagement in a behaviour (Ajzen, 1985; 1991, p. 188; Ajzen & Fishbein, 1980) |
| Descriptive norms | Norms closely tied to specific and contextually appropriate referent groups with whom an individual identifies with in particular contexts. Often these groups represent a social identity for an individual and thus the expected standards of conduct are contingent on the degree to which the group is a salient basis for self-conception (Terry & Hogg, 1996; Wellen, Hogg, & Terry, 1998) e.g., peer group, family group |
| Normative influence | A form of influence, affecting attitudes and behaviour, that 'pressures' an individual to conform to expectations and standards of others, often motivated by a desire to be accepted (Deutsch & Gerard, 1955; Nolan, Schultz, Cialdini, Goldstein, & Griskevicius, 2008). |
| Attitude | An evaluation of, or how favourable an individual feels toward a particular behaviour incorporating cognition and affect (Ajzen, 2002) |

2.3.1 Culture and Alcohol Consumption

It is widely accepted that an individual's behaviour does not result purely from biological function, but rather, is an effect of an integration of an individual within a cultural context (Bhatia, 2007; Bloomfield, Gmel, & Wilsnack, 2006; Bronfenbrenner & Morris, 2006).

Although there are a multitude of definitions of culture and diverging theoretical frameworks for examining cultural influences on behaviour, there is agreement on its importance in influencing an individual's development and behaviour (Geertz, 1973; Gemignani & Peña, 2007). Gemignani and Peña (2007) compare and merge the two main schools of thought that exist in the theory of culture: social constructionist models and cultural studies. The social constructionist model has emerged from a constructivist approach that critiques rationalist concepts, such as objectivism and reductionism, by proposing that reality is constructed by social and political influences and an individual's relationship to these influences (Gergen, 1994). A social constructionist approach emphasises language and how shared cultural meanings create a mutual understanding of reality (Gemignani & Peña, 2007).

In comparison, a cultural study's perspective of the role of culture focuses on the influence of power and political, religious and educational institutions (Gemignani & Peña, 2007). It explicitly emphasises that cultural influences implicit in an individual's daily life are political processes that are biased in serving institutions with power in a society. In merging the two approaches, Gemignani and Peña describe culture as being an ever-changing entity embedded in every person's life. It is experienced through processes of identification and relationship with a context in which one operates. So, public/shared meanings and beliefs about an experience or behaviour are experienced by an individual in a cultural context and depending on how

much or how they identify with these phenomena or relate to the context may influence their behaviour. Geertz (1973) suggests that culture is a pattern of public meanings that are expressed in symbolic forms (e.g., language, etiquette, rituals, artefacts, calendars) that contribute to an individual's way of thinking, feeling, believing and acting. It is arguable therefore that culture, then contributes to an individual's interpretation of an experience and guides their action within a context. Geertz promoted the examination of culture and interpreting the patterns of meaning in research through ethnography.

The field of cultural psychology contains a variety of ways of operationalising cultural factors. For instance, cultural psychology can be examined from either a focus on macro-cultural factors or micro-cultural factors (Ratner, 2008). Macro-cultural factors are more distal social influences that include: social institutions such as government and educational facilities; artefacts, such as advertisements, clothing, shopping environments; and cultural concepts, such as time, privacy and wealth (Ratner, 2008). Micro-cultural factors, in contrast, are concentrated on the more intimate direct relationships an individual has with his/her environment, such as family, community and schooling. Ratner argues that it is necessary to acknowledge and integrate all systems of influence to gain a comprehensive picture.

A number of researchers recognise the importance of culture as a contributing factor to drinking behaviours (Davey, Davey, & Obst, 2005; Leonard & Homish, 2008; Perkins & Craig, 2006). For instance, alcohol use is influenced by cultural norms that prescribe how and when it is appropriate for alcohol to be consumed and must be considered when addressing alcohol use risks (Grønkjær et al., 2011). An extensive literature review by Roche and colleagues (2008) demonstrates how culture frames young people's perspectives around alcohol consumption and influences

drinking behaviour. This review highlights the socially constructed meanings that young people give to the way in which they consume alcohol. Whilst there are a variety of definitions of culture, ranging from broad to specific concepts, the most relevant to this research is in line with Roche et al.’s conceptualisation of socially constructed meanings. Table 4 outlines the key points that underpin the important role that culture plays according to Roche et al’s review.

Table 4

Roche and colleagues’ (2008) Key Points Highlighting Cultural Influences on Young People’s Alcohol Consumption

Main Cultural Influences on Young People’s Alcohol Consumption in Australia

Culture frames people’s perspectives through the socialisation processes

Traditional ideas around alcohol consumption have been affected by broader cultural changes.

Drinking practices are underpinned by socially constructed meanings that are undergoing continual change. These meanings and practices have changed intergenerationally.

People are not passive recipients of cultural influence, but, through their interaction with others, are also active shapers of culture.

Consequently, this current programme of research recognises cultural contexts on women’s drinking behaviour by acknowledging and maintaining an awareness of the broadest cultural ideologies that filter through the different social levels affecting the individual. It will do so by examining the social influences at a distal level or system (e.g., media and legislative influences), and a more proximal level or system

(e.g., peer and family influences) as well as psychosocial influences within the individual (individual's thoughts, feelings, attitudes, values and behaviours) on women's drinking practices. The gender-specific research provides a current and gender relevant depiction of an emerging phenomenon and can be used to guide gender-specific interventions.

2.3.1.1 Culture pertaining to Women's Alcohol Consumption

In assessing the socio-cultural context of women's drug use, Measham (2002) found that women's recreational drug use is set within a larger cultural context that reaffirms both traditional and non-traditional forms of femininity. Their substance use behaviours come with an image that conforms to such representations of femininity, such as the 'club babe' who balances being sexually attractive and sexually active, but not sexually promiscuous (Measham, 2002). Similar findings emerged from a study into young people's 'clubbing' in Melbourne which indicate that alcohol consumption is an expression and enactment of both class and gender (Lindsay, 2006). This qualitative investigation of the dance club scene shows that drinking venues have become more feminised and choice of venue represents a young person's identity in terms of class and femininity.

There is still ongoing discussion in the literature regarding how best to conceptualise femininity. There is substantial evidence that rather than there being one single femininity, it is better conceptualised as a multidimensional construct with numerous femininities (Budgeon, 2014; Constantinople, 2005; Schippers, 2007). That is, femininity is not the polar opposite of masculinity (Constantinople, 2005), but there are different forms of femininity (Schippers, 2007). Schippers (2007) draws upon the seminal work of Connell (Connell, 1995; Connell & Messerschmidt, 2005) to conceptualise femininity in relation to masculinity. Connell (1995, 2005) argues that a

hegemonic masculinity is one that is idealised and desired as it maintains power relations between men and women, and as women are subordinate in this relationship, there can be no such thing as a hegemonic femininity. However, Schippers (2007) refutes Connell's (2005) argument and suggests that conceptualising femininity and masculinity as relational, allows room for the notion of hegemonic femininity. She describes how hegemonic femininity has meanings and practices ascribed to it that maintain the power relations between men and women.

Schipper (2007) argues that there is a hegemonic femininity which incorporates representations of dominant culture, and is displayed through idealised characteristics such as long blond hair, respectability when drinking and so on. Further, there are alternative femininities, which reject the representation and portrayal of hegemonic femininity, such as those found in rock bands and entertainment spheres (Schippers, 2002). Although hegemonic femininity is the dominant idealised form many women also adhere to these alternative femininities even if they appear to be lower in hierarchy. Regardless of the complexities in conceptualising femininity and gender roles, it is evident that there is a relationship with these forms and the way in which women drink (Holloway, Valentine, & Jayne, 2009; Lyons & Willott, 2008; Rolfe, Orford, & Dalton, 2009). Both men and women engage in social behaviours, such as drinking, adhering to different forms of masculinity and femininity, which can prescribe where and how women drink (de Visser & McDonnell, 2012; Holloway et al., 2009; F. Hutton et al., 2013).

Whilst Measham and Brain (2005, p. 277) discuss how alcohol consumption in the night-time economy occurs in "socially prescribed ways", Day (2010) argues that British drinking culture has not become feminised, but rather women drinking in public venues operate within in a class-defined construction of femininity. For

example, middle-class women invest in images of femininity to a greater degree than working class women, for whom these images may be somewhat inaccessible as a result of their class. That is, images of femininity and feminine ideals are informed by middle-class values (Day, 2010). Similar findings were depicted in Lindsay's (2006) study of women in Melbourne night clubs, wherein women in more commercial (middle-class) venues enacted a more emphasised form of femininity. Thus, when examining the relationship between culture and women's alcohol consumption it is important to address the roles that women are prescribed in a culture, their class, and how these forms of identity influence behaviours in both proximal and distal contexts.

2.3.2 Social Influences – A Distal System Interacting with a Proximal System

Sociological research has examined the complex interplay between young people's alcohol and drug use and the social factors that have influenced it for well over a decade. A review of the literature indicates that distal factors influencing people's behaviours (including drug and alcohol use) (Bartlett, 2013; Measham, 2004b; Parker, Williams, & Aldridge, 2002; Treno & Lee, 2002) interact with factors in the individual's most immediate environment that are more proximal to the individual (Beyers, Toumbourou, Catalano, Arthur, & Hawkins, 2004; Leonard & Homish, 2008; Livingston et al., 2012; P. H. Smith, Homish, Leonard, & Cornelius, 2012). Measham (2006, p. 258) describes young people's substance use in terms of an "emergent culture of intoxication". Measham has written extensively about how alcohol consumption is affected by the relationship between social structure and human agency, wherein the various structures of an individual's society interacts with the individual's ability or tendency to act a certain way (Measham & Shiner, 2009). Analysing the broader contexts, Measham (2004a, 2006) argues that legislative and economic developments influence young people's alcohol consumption, wherein the

deregulation of the alcohol market and licensing reform in Britain counters public health programmes that espouse recommendations for harm minimisation at an individual level.

Measham and associates (2004b, p. 337) also discuss the way in which public drinking venues (“leisure spaces”) have changed in Britain over the past twenty years and how, in combination with governmental and commercial responses to these changes, a “culture of intoxication” has emerged for young people (Measham & Brain, 2005, p. 262). The interlinking factors within such a culture include: normalisation (Measham & Shiner, 2009) of drug use; the commercialisation of leisure through “night-time economies” (Hobbs, Lister, Hadfield, Winlow, & Hall, 2000, p. 702; Measham & Brain, 2005, p. 277); “determined drunkenness” (Measham & Brain, 2005, p. 268) and “calculated hedonism” (Brain, 2000, p. 9; Szmigin et al., 2008). Aligning with the current programme of research’s framework, normalisation and night-time economies represent more distal factors. These factors interact with individuals’ attitudes and decision-making in the form of “determined drunkenness” (Measham & Brain, 2005, p. 268) and “calculated hedonism” (Brain, 2000, p. 9; Szmigin et al., 2008), and are thus described in the current research as psychosocial influences (See Psychosocial Influences).

2.3.3 Social Influences Distal to the Individual

2.3.3.1 Normalisation of substance use

Originally, normalisation theory was discussed in terms of cultural attitudes around young people’s recreational substance use and alcohol abuse. This theory suggests that such behaviour is now perceived more as ‘normal’ behaviour rather than ‘deviant’ behaviour. That is, young people using substances as part of their recreational activities have become the ‘norm’. The researchers posit that, easy

accessibility, drug trying rates, current usage, accommodating views of 'sensible' recreational drug use especially by non-users, and the degree of "cultural accommodation in wider society" (Measham & Shiner, 2009, p. 503) of illegal substance use, has facilitated this normalisation (Parker et al., 2002). Normalisation, according to Measham and Shiner (2009), has now evolved to represent distinct social groups operating within culturally defined contexts, wherein a widespread, economically influenced leisure culture facilitates increased substance use.

It is this "growing economic significance of leisure" occurring in post-industrial societies that aligns concepts of leisure with concepts of consumption (Measham & Shiner, 2009, p. 507). Measham and Shiner argue that increasing consumption- oriented night-time economies exist, especially within urban nightclub areas, and that the emerging trends showing prolonged transitions from youth to adulthood drug and alcohol use are more widespread as a result of the economic influences that encourage consumption as a part of leisure. Hence the normalisation of substance use highlights the way in which factors at this level can filter through to the psychosocial level, wherein external factors affect individuals' attitudes. Social contexts reflecting normalisation of substance use become internalised within individuals to the extent that their attitudes and behaviours mirror this position to incorporate substance use as part of a normal lifestyle⁵.

⁵ Chapter 6 discusses the interview findings which categorise normalisation of substance use as being more reflective of a psychosocial factor, rather than an exosystem factor, showing the extent to which the women have internalised such influences.

2.3.3.2 *Night-time economies*

Reflecting wider social values, consumption-based leisure promotes consumption (in a broader sense and not just in terms of substances) as a form of identity and to demonstrate leisure and comfort as a form of release after work or at the weekend (Measham, 2004a; Szmigin et al., 2008). “Night-time economies” (Hobbs et al., 2000, p. 702) refer to the commercial impacts that affect people’s behaviour through strategies that include: introducing new and exciting alcoholic beverages to be consumed (e.g., alcopops); marketing strategies that are promoting venues or drinks; and redesigning drinking venues so that they fit a wide range of tastes (Hobbs et al., 2000; Measham, 2004a). For example, Measham and Brain (2005) argue that the increased commercialisation through the “recommodification” (p. 267) of alcohol occurred in order to compete with the rise of illicit drug use at the weekend (e.g., ecstasy and rave parties). Furthermore, their research has outlined the intergenerational changes in nightclub areas as embodying night-time economies. The importance of nightlife contexts and drinking establishments aligns with the current programme of research’s proximal level and is therefore discussed further in that section. Promotion and regulation of night-time economies are also somewhat influenced by the media, marketing and legislation (Measham, 2004a; Measham & Brain, 2005).

2.3.3.3 *Media, marketing and legislation*

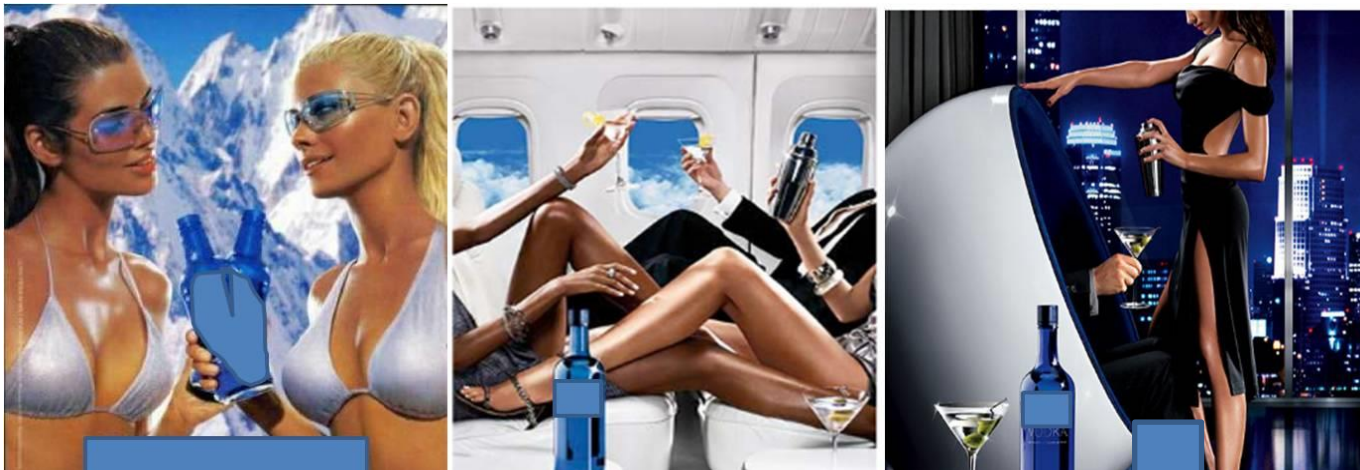
Media portrayal of alcohol and the marketing of alcohol has also been recognised to influence people’s beliefs about alcohol and affect their drinking behaviour (Roche et al., 2008; L. A. Smith & Foxcroft, 2009; Unger, Schuster, Zogg, Dent, & Stacy, 2003). Despite this recognition, children from a very young age can be exposed to such advertising (Fielder et al., 2009). Arguably then, governmental legislation needs to be regulating media activities in such a way as to minimise

exposure (e.g., scheduling of alcohol advertising) (Fielder et al., 2009). Furthermore, media coverage of Hollywood celebrities drunk or driving under the influence is possibly a glorification of such behaviour (K. C. Smith, Twum, & Gielen, 2009). In an Australian context there has been debate on a documentary depicting a high-profile sports personality's (Ben Cousins) struggle with addiction (P. Goldman, 2010), in terms of whether it sanctions and glorifies use, or raises risk awareness (Buttler, 2010; Devine, 2010; Doherty, 2010; Hinds, 2010).

Whilst media influence is discussed in the literature, there is little research on the way women specifically are influenced or represented by media and marketing of alcohol. An historical review of the marketing of beer as a gendered activity in the USA is one of the few that discusses media imagery in terms of gender representation (Corzine, 2010). Jones and Reid (2010) also investigated young people's perceptions of women being portrayed in alcohol advertisements. Some conclusions can be drawn indirectly from research that examines advertising on young people's drinking. For instance, a study assessing young adults' perceptions of young women drinking found predominantly positive characteristics were attributed to young women drinking (S. C. Jones & Rossiter, 2003). Cui's (2000) research indicates that alcohol advertising that targets women is increasing and is problematic, whilst Ringold (1995) argues that there is no problem targeting women with alcohol advertising as it is their civil right to be informed. Although there is some debate on the effects of alcohol advertising (Cui, 2000; Ringold, 1995), there is some evidence to suggest gendered effects of advertising (Jernigan, Ostroff, Ross, & O'Hara, 2004). Roche and colleagues (2008) espouse the importance of magazines, television, movies, and the internet in influencing social norms, values, and attitudes toward alcohol consumption. Advertisements for a particular alcoholic drink use images of women consuming their

product with women who comply with a tall tanned thin stereotype of Western femininity. Further, alcohol is portrayed as part of luxurious lifestyles and is intertwined with sexuality (See Figure 3 for some examples of such advertisements). Stankiewicz and Rosselli (2008) contend that even in women's magazines, women are sexualised in advertising more than men. The sexualisation of women and representation of the supposed feminine ideal is exemplified in the series of advertisements presented in the following figures. Specifically, Figure 4 shows the more overtly sexual images and those in Figure 5 show images depicting a slightly more sophisticated form of sexuality. All images, however, may be considered as prescribing feminine ways of drinking.

Figure 3. Vodka advertising showing images of feminine stereotypes and lifestyles of luxury and sexuality



(Skyy Spirits LCCC, 2011)

Figure 4. Celebration, sexuality and glamour



(Dom Perignon; Reflexgroup, 2011)

Figure 5. Feminine Ideals Emphasising Sensuality and Sophistication



2011)

(David Campari, 2011; WebMediaBrands Inc.,

Some literature proposes that the way in which women now drink mirrors what was perceived as traditionally masculine ways of drinking (Day, 2010; Montemurro & McClure, 2005). For instance, the mirroring of what was once considered masculine drinking activities is occurring in contemporary situations. For example, young women have bachelorette parties (Montemurro & McClure, 2005). A bachelorette or a 'Hens' party is the female equivalent of a 'Bucks' / 'Stag' party, both of which are socially defined pre-wedding rituals. The bride-to-be has a public display of her last jaunt of singledom and is recognised by symbolic parodies of marriage, such as wearing a veil around the drinking venues (Eldridge & Roberts, 2008).

In contrast to Montemurro and McClure's (2005) critique of bachelorette parties, Eldridge and Roberts (2008) argue that there are many types of 'hens' parties that include weekends with manicures, shopping trips and pampering sessions and thus, are simply emerging rites of passage for women. However, this practice still can be viewed from a perspective of consumerist pursuits of leisure and the hen's party that entails a night of drunken excess and boisterous behaviour with the aim to embarrass the bride-to-be still mirroring the expected behaviours at a buck's party, and having a "masculine" activity as the main point of reference. This change in the culturally accepted ways for men and women to drink alcohol may be important in influencing the changing of women's drinking behaviours within certain contexts.

The role of masculine values and behaviours is underscored in such contexts (Day, 2010) and thus, it stands to reason that the socially prescribed rules manifested through distal social norms reflect wider cultural values. This may be exemplified by some women's acceptance or tolerance of sexual harassment within nightclubs (Armstrong, Obst, Thunstrom, Haydon, & Davey, 2010a, 2010b). It is therefore important to explore how feminine identities and cultural roles are represented with

regards to women's alcohol consumption and interact with women's drinking behaviours. Hence, the current project will explore how such identities and roles inform women's alcohol consumption during various life stages.

The societal roles that a woman assumes are influenced by cultural and distal social norms and may also be associated with their drinking patterns (Kubička & Csémy, 2008). For instance, a review by Allamani (2008) examined the changing pattern of women's alcohol consumption in relation to their shifting societal roles. The review compared two distinct cultures within Italy and concluded that the relationship between women's roles in contemporary society and their drinking behaviour is a complex one that needs further exploration. Allamani (2008) also argues that each country has its own range of cultures and acculturation processes around gender. Hence, alcohol consumption needs examining from a female perspective in each country to enable valid targeted policymaking and interventions (Allamani, 2008).

While recent research does highlight distal social influences on people's drug and alcohol use, it has focussed largely on young people. There is a need for further research pertaining to gender as a cultural and social filter as authors in this area note (e.g. Measham & Shiner, 2009). To thoroughly examine gender as a factor in alcohol use, research needs to look at a wider range of women, not just young women. In particular research is needed that compares the salience of factors influencing women's drinking across age ranges. Research indicates the importance of established drinking patterns earlier in life as a predictor of drinking patterns in later stages of life (Leonard & Homish, 2008; Moos, Schutte, Brennan, & Moos, 2010; Powers et al., 2010; Toumbourou, Williams, Snow, & White, 2003).

Examination of 'drinking careers' is pertinent in view of a rise in problematic drinking among older adults (Gfroerer, Penne, Pemberton & Folsom, 2003) and in

conjunction with findings that drinking problems prior to 50 years of age are predictive of excessive alcohol consumption in later life (Moos et al., 2010). However, there is little research on the underlying influences of older women's drinking behaviour and, in particular, how their drinking behaviours when younger may have influenced their current drinking behaviours. This limitation is especially pertinent as changes in trends occur between generations (Measham & Ostergaard, 2009).

Changing trends in alcohol consumption, as reflected in, and influenced by, factors at a more distal level, are affecting women of a wide range of ages and thus have health implications for not only younger women, but also older women. The current investigation of key cultural and social influences affecting women's drinking behaviours across a range of ages could facilitate an understanding of these trends and address an important gap in the literature that can inform the development of future interventions.

2.3.4 Social Influences Proximal to the Individual

Prior research has tended to focus on the more proximal social influences when looking at protective and risk factors for adaptive and maladaptive behaviours (Beyers et al., 2004; Davey et al., 2005). Similarly, drug and alcohol research has had a large focus on proximal factors, such as the influence of peers and family (Beyers et al., 2004). Again, the majority of this research focuses on young people, with the exception of a few investigations on older cohorts that establish the influences that spouses have on each other in regard to alcohol use (Leonard & Homish, 2008; Leonard & Mudar, 2004).

2.3.4.1 *Peers, Partners and Family*

Peer influence is a major aspect that affects people's attitudes and behaviours and hence, research has shown this influence to be the case with young people's

alcohol consumption (Armstrong et al., 2010a, 2010b; Davey et al., 2005; Henry, Slater, & Oetting, 2004; Roche et al., 2008). Young people also alter their consumption as a result of the alcohol-related behaviour that is modelled in their immediate environment (Larsen et al., 2009). This tendency is consistent with results that emerged from a prior study, where participants described difficulties resisting alcohol consumption when in the company of drinking peers (Armstrong et al., 2010a, 2010b). For older adults, a range of protective and risk factors were found to moderate the effect of spouse influence on an individual's alcohol consumption levels, but regardless of such factors, spouse influence is still significant (Leonard & Homish, 2008). These factors reflect the importance of the social environment within a partnership/ marriage, which includes the drinking habits of one's partner and peers (Leonard & Homish, 2008; Leonard & Mudar, 2004).

Similarly, the impact of an individual's immediate social environment is evident when one's behaviour is influenced by referent group norms. For instance, parental influence can affect children's attitudes and behaviours toward drug and alcohol use (Armstrong et al., 2010b; Beyers et al., 2004). Parental modelling of drinking behaviours, in conjunction with overt discussions regarding alcohol use, shapes their children's views around alcohol and alcohol-related behaviours (Armstrong, et al., 2010b; Roche, et al., 2008). Finally, the importance of the immediate drinking context, such as the drinking venue, has also been established and is discussed below.

2.3.4.2 Drinking Venues – Influences of the Immediate Environment

Research has shown that the physical environment, staffing and social factors within a drinking venue have been associated with higher levels of alcohol use and related harm (Hughes et al., 2011). As discussed previously, research outlines the

emergence of night-time economies, exemplified by changes in drinking establishments. For instance, drinking establishments have been made more feminised since the ladies' lounges⁶ of the 1960s where venues were primarily male domains. Now, women drink in public venues more so than previous generations (Lindsay, 2006) and, as Brain (2000) posits, 'going out drinking' has changed from a male working class activity to a consumerist leisure activity. Brain puts forward the emergence of hybrid bars or chameleon bars that are multifaceted and so may be pubs or cafe bars during the day and nightclubs during the evening as part of these changes. Hobbs and associates (2000) argue that with the coming of evening, the rules or norms of conduct change within the night-time economy and the pursuit of leisure and are sanctioned in a nightlife context.

2.3.4.3 Proximal Social Factors related to Women's Alcohol Consumption

In reviewing the literature, only a limited number of studies were found that examined the more proximal social factors specifically influencing women's drinking. Leonard and Homish (2008) discuss the influence that a husband's drinking has on his wife's drinking. An early study showed peer influence and contextual factors (specifically, time spent in drinking situations and organisation membership) as predictors of middle-class women's alcohol consumption (Shore & Batt, 1991). Peer influence may also interact with psychosocial factors around social facilitation and is discussed in more depth in Section 2.4.3 (Psychosocial Influences explicitly pertaining to Women's Alcohol Consumption; pp. 38-39) below. However, as discussed, research

⁶ The term ladies' lounges, refers to the separate space that women used in drinking establishments (hotels) in Australia (Wright, 2003) as a result of licencing laws preventing women from being served alcohol in public bars (Kirkby, 1997, 2003).

is lacking that explores specific factors at a proximal level, in a woman's most immediate environment, that may affect women's drinking behaviours.

The research described in this section (pp. 34-36) supports the importance of social factors at a proximal level, such as peers, partners and family in influencing alcohol and substance use. However, research needs to explore how these social factors might affect women's alcohol consumption and how they might interact with factors at other cultural, distal and psychosocial levels affect women's alcohol consumption, to complete the picture of the complex interactions that occur.

2.4 Psychosocial Influences

Research examining the psychosocial influences on alcohol consumption primarily focus on the individual's health behaviour decision-making process (Bogart & Delahanty, 2008; Livingston et al., 2012). That is, research on psychosocial factors encompass: attitudes toward drinking; perceived approval of one's drinking of those around us (subjective norms); self-efficacy or perceived behavioural control (perceptions of how easy or difficult it is to partake or abstain from drinking); intentions to drink or abstain from drinking; and beliefs about alcohol consumption (e.g., it is a rite of passage when someone turns 18 years of age). For instance, expectations of the outcomes of consumption (i.e., alcohol expectancies); referent group norms from parents and peers (Livingston et al., 2012) have all been linked with the amount and frequency of alcohol consumption (Cable & Sacker, 2008; King & Vidourek, 2010). Using the AUDIT (Saunders et al., 1993), Servo (2008) highlighted key psychosocial features that are predictive of hazardous and harmful patterns of alcohol consumption. The following describes two key attitudes toward alcohol consumption, "determined drunkenness" (Measham & Brain, 2005) and "calculated

hedonism” (Brain, 2000; Szmigin et al., 2008) that stem currently from research primarily on young people's drinking.

2.4.1 Determined drunkenness

A combination of the wider cultural acceptance of young people consuming alcohol and the economic and marketing impacts of the alcohol industry, discussed previously, sanctions alcohol consumption and drunkenness to an extent (Measham & Brain, 2005). Measham and Brain (2005, p. 268) describe “determined drunkenness” as an attitude and set of practices that young people have when they perceive a fun night out in terms of planning to, not just drink, but get drunk. “Determined drunkenness” is facilitated by cost effective alcohol consumption that is efficient enough (e.g., fast drinking, mixing of drinks, higher alcohol content drinks) to attain the desired state of intoxication. It is a balancing of a desired state of intoxication and an actual state of intoxication, thus reflecting an attitude that underlies an aim to go out and get drunk.

2.4.2 Calculated hedonism

Consistent with the notion of “determined drunkenness” researchers describe young people's alcohol abuse, this balancing of intoxication, as a “controlled loss of control” (Measham, 2004a) or as “calculated hedonism” (Brain, 2000, p. 9). “Calculated hedonism” describes a work-hard, play-hard balance, where young people consume their substance of choice in a culturally sanctioned context (Szmigin et al., 2008). So, for instance, it incorporates the calculated risks of only “partying” on the weekends or between semesters. It is all about having fun, the pursuit of leisure time requiring a level of drunkenness, mischief making and having fun in a social context but still maintains a dimension of control that is not always apparent to the onlooker (Szmigin et al., 2008). The notion of calculated hedonism can assist in understanding

excessive alcohol consumption that is contained by time, space and social situation (Measham, 2004b; Szmigin et al., 2008). Hence, from a psychosocial perspective, calculated hedonism can be perceived as attitudes toward getting drunk in a socially acceptable way as reward and relaxation after a week's work.

2.4.3 Psychosocial Influences pertaining to Women's Alcohol

Consumption

A number of studies indicate social facilitation as a commonly cited reason for drinking (Armstrong et al., 2010a, 2010b; Eldridge & Roberts, 2008; Sheehan & Ridge, 2001). Social facilitation, as defined within the alcohol consumption context, refers to drinking to improve one's communication with others (M. S. Goldman, Darkes, & Del Boca, 1999). Reduction of social and sexual inhibitions facilitates conversation and meeting of prospective partners and is part of hedonistic pursuits (Measham, 2002; Roche et al., 2008). Some researchers argue that women use alcohol to break free from traditional norms that regulate their sexuality and thus, as a woman out 'clubbing' or drinking in excess, the night-time situational norms allow more sexual freedom (Measham, 2002; Montemurro & McClure, 2005; Sheehan & Ridge, 2001). Sheehan and Ridge (2001) interviewed women of secondary school age to gain an insight into their attitudes regarding alcohol and the role that it had in their lives. They found that alcohol serves an important function in facilitating relationships and sexual exploration and any countering of its positive role is diminished by storytelling of alcohol-related pursuits within their peer groups.

2.5 The Need for Further Exploration – Gaps in the Research.

In summary, a review of the literature indicates that cultural, social (both distal and proximal) and psychosocial factors substantially affect alcohol consumption and associated behaviours. However, very little of this research has addressed the impacts

that these factors have on women's alcohol consumption, specifically. There is evidence suggesting harmful changes are occurring across a range of ages in women's attitudes and behaviour around alcohol. The literature that does specifically discuss women's substance use is starting to emerge and identifies the importance of class, feminine identity, women's societal roles, and the psychosocial function of alcohol (e.g. Christie-Mizell & Peralta, 2009; Kirkby, 2003; Kubička & Csémy, 2008; Lindsay, 2006; Measham & Ostergaard, 2009), but invites further necessary investigations into this area. The gaps in the existing research reveal a need to build a more comprehensive picture of how cultural, social, and psychosocial factors relate with each other and influence women of a range of ages to drink. Such research would provide important insights into the recent changes in women's drinking behaviours.

As indicated throughout this literature review, there is research demonstrating the importance of multiple systems of influences on people's alcohol consumption and related behaviours. There is a large focus on problematic drinking and young people's drinking behaviour. However, cultural and social changes precipitate the need for new areas of research. Specifically, the changing patterns of women's alcohol consumption and behaviours demand an examination of women's alcohol consumption, not only focussed on the younger cohorts, but across a wider range of ages to ensure a more comprehensive picture. Particularly, research is needed that comes from a psychological framework, addressing different systems of social influence on the psychosocial aspects of women's drinking to highlight the attitudes, values and beliefs that underlie the behaviours of the women operating in the current cultural context.

This holistic understanding can inform intervention strategies which incorporate the interrelated systems that affect women's drinking behaviours. With the exception of a few studies, the work that has commenced in this area tends to focus on

just one level of social influence (i.e., cultural, social or psychosocial influences) ignoring possible multiple systems of influence. Moreover, much of the available evidence is based within a European context and it is unclear the extent to which it may generalise to an Australian context. The current changes in women's drinking in an Australian context and inter-generational shifts in the patterns of women's alcohol consumption present an area, as yet, not extensively explored in the research literature.

Recent research highlighting the impact that culture, social and psychosocial factors have on young people's drug and alcohol use (Davey, Davey, & Obst, 2005; Measham, 2006; Roche et al., 2008) excludes factors that may be specific to the changing consumption trends in women of all ages. It does not apply gender as a cultural filter as authors in this area call for (e.g. Measham & Shiner, 2009); nor does it examine the changing drinking patterns emerging amongst older women. Changing trends in alcohol consumption, as reflected in and influenced by cultural factors, are affecting women of a wide range of ages and thus have health implications for not only younger women, but older women.

To thoroughly examine gender as a factor in alcohol use, research needs to look at a wider range of women, not just young women. Whilst the research indicates the wisdom of future studies examining changing drinking patterns across age cohorts, very little can be found in the literature. In particular, research is needed that investigates the salient factors across multiple levels of social influence on women's drinking as a function of how gender and alcohol use interact across age. Similarly, existing research describes the clear importance of psychosocial influences on drinking behaviour, but again, primarily focusses on a younger population and does not address influences that may pertain specifically to women, or to women of a range of ages.

In reviewing the literature it is evident that cultural, social, and psychosocial factors are important in influencing young people's drinking behaviours, and with evidence that suggests harmful changes are occurring across a range of ages in women's attitudes and behaviours around alcohol, there is a need for examining cultural, social, and psychosocial influences that may be contributing to these changes. The literature that does discuss women's substance use is starting to emerge, and comes largely from sociological and feminist perspectives. It identifies the importance of class; feminine identity; women's societal roles; and, to a more limited extent, the psychosocial function of alcohol for women. Further investigations are needed from a social psychological perspective into the key cultural, social and psychosocial factors influencing women's attitudes and behaviours around alcohol in order to inform interventions at various systems of influence.

Chapter 3 presents an overview of key psychological theoretical perspectives that can provide frameworks with which to explore in depth women's drinking taking into account multiple systems of influence.

Chapter 3 - Theoretical Frameworks Guiding the Current Research

Chapters 1 and 2 outlined the need to examine the cultural, social and psychosocial influences on women's drinking across a range of age groups. The current chapter, Chapter 3, will briefly highlight the rationale behind the two theoretical frameworks chosen to guide the current programme of research, the Bioecological Model of Human Development (BMHD, Bronfenbrenner & Morris, 2006) and the Theory of Planned Behaviour (TPB, Ajzen, 1991). Then, more detailed definitions and discussions of both models will be provided.

The application of a theory to guide research design and development can be useful in providing consistent definitions and constructs (Koh, 2013). Theory-based research can provide cohesion and structure to the research design and can be particularly useful in a relatively new field of study (Koh, 2013). Additionally, theory-based research is of value in informing theory-based interventions which can be more effective and more readily evaluated (Glanz & Bishop, 2010).

In light of the existing empirical evidence, it is clear that there are a range of factors influencing women's alcohol consumption emanating from broad cultural factors through to more proximal psychosocial factors. Bronfenbrenner's Bioecological Model of Human Development ([BMHD] Bronfenbrenner & Morris, 2006, see Figure 3) provides a theory of five systems which affect an individual to influence development and behaviour, with the broadest system incorporating attitudes and ideologies of the individual's culture and the narrowest system incorporating the individual's most immediate environment (social and physical). Hence the BMHD provided a strong theoretical framework to examine the multiple levels of influence on women's alcohol consumption.

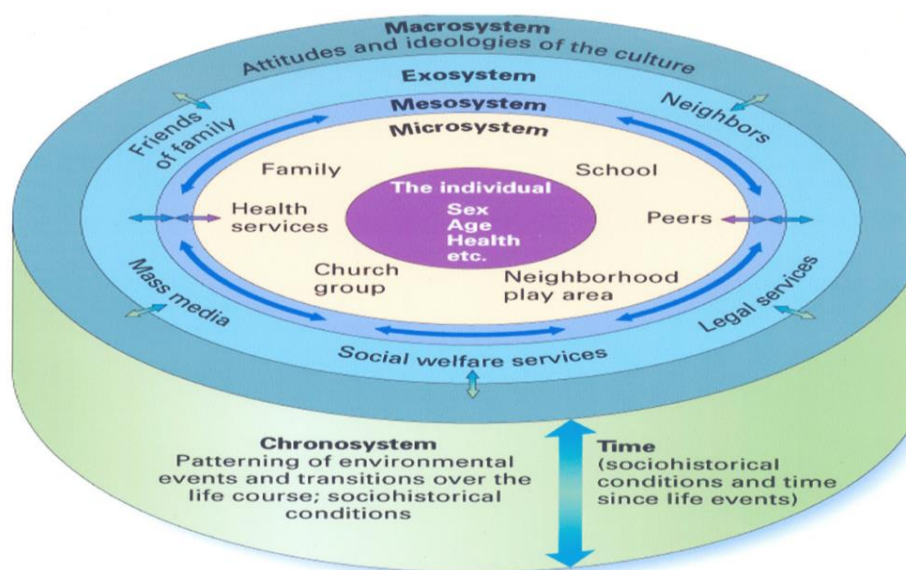


Figure 6. Bronfenbrenner's Bioecological Model of Human Development

(Bronfenbrenner & Morris, 2006; Santrock, 2007, p. 49)

Bronfenbrenner's model has been useful in defining multilevel predictors of a variety of health-seeking and risk-taking behaviours (Ayoola et al., 2007; Van Horne, Wiemann, Berenson, Horwitz, & Volk, 2009). In an Australian context, it is the basis of The Longitudinal Study of Australian Children (LSAC, Department of Families, 2009), government-funded research that seeks to identify factors which influence adaptive and maladaptive developmental pathways. Previous empirical use of the BMHD indicated the potential utility of this framework (Ayers, Wagaman, Geiger, Bermudez-Parsai, & Hedberg, 2012; Bogg & Finn, 2009; Crosby, Salazar, & DiClemente, 2013; Department of Families, 2009), especially taking into account prior evidence that alcohol-related influences might extend from broad cultural factors to intra-individual factors.

Although application of the BMHD (2006) could potentially provide the broad structure to organise the various levels of influences on women's alcohol consumption, employing a more focussed theory was also considered necessary to

provide a depth of understanding of psychosocial factors at the level of the individual. The TPB is one of a number of models that have been applied extensively to health related behavioural change research. With the BMHD allowing a broader examination of influences on women's drinking, the TPB complemented the BMHD by narrowing to a more specific health behaviour model that has been previously utilised in behaviour change interventions (Murnaghan et al., 2009; Norman & Conner, 2006; G. J. Y. Peters, Kok, & Abraham, 2008). As seen in Figure 7, the TPB is a linear model that takes into account psychosocial aspects of behavioural decision-making and central to the model is the relationship between behavioural intentions and behaviour.

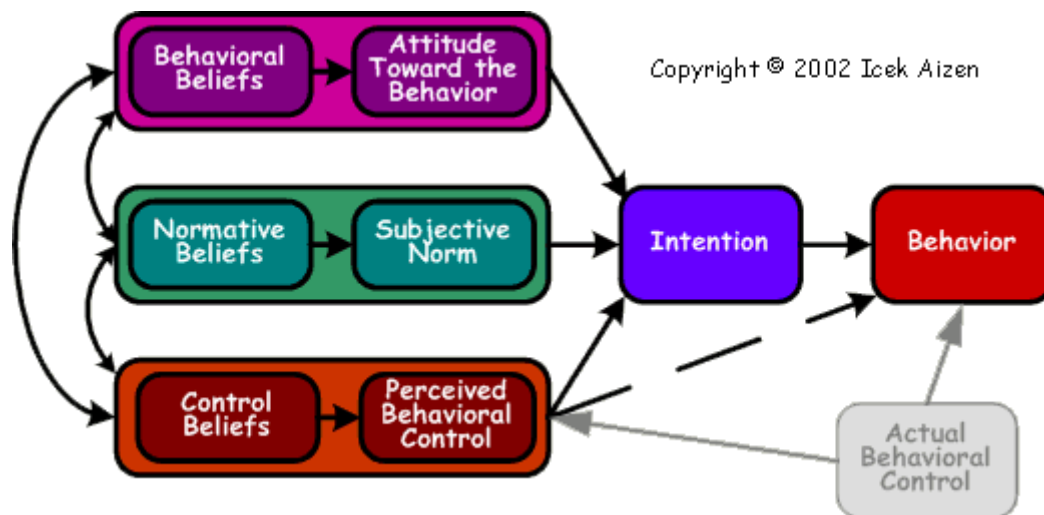


Figure 7. The Theory of Planned Behaviour (Ajzen, 2006).

The TPB has been successfully applied to explain a range of health-related behaviours, especially with regards to substance use and addictive behaviours (A. L. Dumitrescu, Duta, Dogaru, & Manolescu, 2013; Gannon, Rosta, Reeve, Hyde, & Lewis, 2014; Orbell et al., 2009). The TPB is a continuum model pertaining to predictors of behaviour from socio-cognitive factors. It is more targeted on decision-making and behaviour change, with greater attention on direct influences on the individual. In comparison, the BMHD incorporates both direct and indirect factors.

Bronfenbrenner's model (2006) facilitates a more comprehensive depiction of cultural and social contributors to an individual's behaviour (e.g., women's drinking), thus providing a guide for broader systems concepts. In contrast, the TPB facilitates potential identification of key influences, within the individual, occurring at the psychosocial level.

Identification of the key predictors of women's alcohol consumption would permit the development of targeted interventions focussed on the salient motivations underpinning alcohol consumption behaviour. The following section provides greater detail with regards to the key psychological theories and how they were used to guide the current programme of research.

3.1 Bronfenbrenner's Bioecological Model of Human Development

Bronfenbrenner's BMHD (2006) provides a comprehensive model of cultural influence as well as showing the moulding of an individual's development and how that informs their current decision-making and behaviour. Bronfenbrenner and Morris' (2006) perspective incorporates four defining properties: process, person; context; and time. These defining properties have evolved with ongoing contributions from Cairns' work (Cairns, 1970, 1990; Cairns & Cairns, 1994), which progressed developmental psychology as a developmental science and the need for an interdisciplinary, integrative approach, which incorporates biology, culture and the person (Bronfenbrenner & Morris, 2006). Bronfenbrenner (2006) explains how this model of human development has evolved from a model focused on how development occurs within varying contexts (Bronfenbrenner & Crouter, 1983) to a model that examined the complexities within those contexts such as the processes that occur between individuals and their environments (including processes between symbols)(Bronfenbrenner, 1986). The most recent version, representing the bioecological model, incorporates processes of continuity and change in the

biopsychological characteristics in the individual (Bronfenbrenner & Morris, 2006), and thus demands further exploration of the characteristics of the individual.

Hence, the core premise of later versions of the model involves ‘process’, meaning the interaction between the individual and their environment, defined as proximal processes. These processes are mediated by the other three defining properties by which influence may vary depending on: the ‘person’ (individual characteristics, biological factors and personality factors, specifically pertaining to disposition, personal resources and demand characteristics that cause reactions from the environment); the ‘context’ (both immediate and distal environments); and ‘time’ in which the proximal processes occur (Bronfenbrenner & Morris, 2006). It is important to note that the interactions are not one way, but multidirectional, which means that whilst the systems are affecting an individual’s development, an individual too can influence his/her environment.

As Figure 6 depicts, the model examines how five systems affect an individual’s development (Bronfenbrenner & Morris, 2006). These cultural and social constructs then affect an individual’s current identity and ways of thinking, feeling, wanting and valuing and thus shapes their behaviour (Shweder et al., 2006). Bronfenbrenner’s model recognises the important function of social roles, norms and rules in shaping an individual’s identity and consequent behaviour. Furthermore, the importance of symbolic interactions, as described in this theory, is appropriate for the exploration of culture as discussed previously. The five systems are defined in Table 5 below, with examples of how factors within each system may be applicable to a woman’s drinking perceptions and behaviours.

Table 5

Bronfenbrenner's Bioecological Systems (Bronfenbrenner, 1994; Bronfenbrenner & Morris, 2006)

| Bioecological systems | Definition |
|-----------------------|---|
| Microsystem | Patterns of activities, social roles and interpersonal relations that are part of an individual's interactions with their immediate environment. This context can include physical, social and symbolic interactions occurring, for example, with family, peers and colleagues. |
| Mesosystem | Mesosystems are the processes and linkages that occur between two or more settings containing the developing individual. Hence, the mesosystem is a system of microsystem. For example, the connections that happen between home and work or between family and peers. |
| Exosystem | The exosystem pertains to the processes and links between two or more settings, of which at least one does not contain the individual in question. The exosystem pertains to events that indirectly influence processes within the individual's immediate environment. In other words, when experiences in a social setting, which do not directly involve the individual, influence what the individual experiences in an immediate context. For instance, the relationship between the media and a person's immediate environment (e.g., An individual's peer group creates celebrations around a radio station's countdown - Top 100 parties). |
| Macrosystem | The macrosystem involves the wider culture that an individual lives in. It consists of the overarching pattern of micro-, meso-, and exosystems and pertains particularly to cultural beliefs, societal values, political and economic trends, and "community happenings". |
| Chronosystem | The chronosystem, as its name implies, concerns time and the changes that occur across one's lifetime on an individual level and within the wider community. For example, the change in societal roles in women's lives across time and how that may affect parenting styles from mother to daughter. |

Bronfenbrenner's (1977, 1979, 2006) bioecological model has been successfully used to identify psychological variables and the relationships between them, that affect social behaviours (Ayoola et al., 2007; Corcoran et al., 2000). Furthermore, such research emphasises the need to examine significant factors from multiple systems of influence and direct interventions at corresponding systems within the framework (Hong, 2010; Van Horne et al., 2009). Other works have adapted Bronfenbrenner's (1977, 1979) bioecological perspective in order to examine the interactions between societal roles, context, time and wellbeing (Moen, 1996; Moen, Robison, & Dempster-McClain, 1995). More specifically, applications within the field of substance use have facilitated a more comprehensive understanding of the factors that influence substance use and provided guidelines for multi-faceted interventions (D. L. Jones, Heflinger, & Saunders, 2007; Yu & Stiffman, 2010).

In summary, the bioecological perspective within this current context could account for cultural differences and the changes that have been occurring in women's drinking patterns and behaviour when looking at the influences that macrosystem factors have on individuals' behaviour. With the acknowledgement of biological predictors of behaviour (Bronfenbrenner & Morris, 2006), this model incorporates the effect of the individual upon its surroundings and does not ignore the importance of the individual's own biological and intra-individual determinants. Whilst there is little emphasis on the cognitive factors of behaviour, it should not be seen as exclusive to other more sociocognitive approaches, but complementary.

Research indicates that the bioecological perspective's comprehensive approach has the capacity to explain cultural influences of behaviour on a number of dimensions and can include sociocognitive factors (e.g., normative influences on attitudes) (Ayoola et al., 2007; Corcoran et al., 2000; Hong, 2010; Van Horne et al., 2009). Armstrong, et al, (2010b) emphasised the social and contextual reasons behind

women's alcohol consumption (e.g., reduction of social inhibition, importance of the relationship between venue and behaviour) and thus it is reasonable to incorporate a perspective that focusses on contextual factors and systems.

The BMHD (2006) would potentially allow an exploration of women's drinking across ages from a psychological perspective. However, as mentioned before, the breadth of this model limits its predictive utility. Due to this limitation, a health decision-making model, the TPB (Ajzen, 1991; Ajzen & Fishbein, 1980) was identified as a suitable model that could complement the BMHD in facilitating a narrowing of the lens to enable further examination of the psychosocial influences on women's drinking. It was proposed that the TPB could complement Bronfenbrenner's (2006) framework in the second phase, the deductive phase, of the research programme to help provide recommendations which could be used to inform behaviour change interventions. The TPB is discussed in the next section.

3.2 The Theory of Planned Behaviour

The TPB (Ajzen, 1991; Ajzen & Fishbein, 1980) is well recognised as a model that addresses socio-cognitive predictors of human behaviour (Ajzen, 2002; Blanchard, Courneya, Rodgers, Daub, & Knapik, 2002; Orbell et al., 2009). The TPB proposes that an individual's behavioural intention is a key determinant to performing that behaviour (Ajzen, 1991, 2002). Furthermore, intention is determined by three constructs: attitudes (toward the behaviour), subjective norms (perceived social pressure that a person may experience regarding whether or not to perform an action), and PBC (perceived difficulty or ease of a behaviour). Attitudes, subjective norms, and PBC are all informed by underlying behavioural (i.e., costs and benefits), normative (i.e., specific referents' (dis)approval), and control beliefs (i.e., barriers and facilitators), respectively (Ajzen, 1988) (See Figure 7). Furthermore, according to

theoretical and empirical evidence, PBC is not only an indirect predictor of behaviour, but also is directly predictive of behaviour (Ajzen, 1991; Armitage & Conner, 2001).

The TPB (Ajzen, 1991; Ajzen & Fishbein, 1980), in its present standard form, evolved from the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975). Both models have intentions to perform a specific behaviour as a central component, and examine the importance of attitude and subjective norms as impacting upon intentions (Fishbein & Ajzen, 1975). However, the TRA was revised to include PBC as a predictor of intentions, and subsequently a direct determinant of behaviour. PBC was incorporated to account for situations in which people do not carry out their behaviour despite intentions. That is, the intention of carrying out a specific behaviour may be present, but the actual behaviour is not carried out as the individual lacks confidence or perceived control over behaviour (Ajzen, 1991).

The TPB has been shown to be an effective model for predicting a variety of health and social behaviours (Blanchard et al., 2002; Martin et al., 2010; Orbell et al., 2009). A number of studies have also examined the efficacy of the TPB in predicting substance use, harm reduction or cessation of addictive behaviours, as well as highlighting factors for intervention (K. J. Johnston & White, 2003; Martin et al., 2010; Orbell et al., 2009; Otten, Harakeh, Vermulst, Van den Eijnden, & Engels, 2007).

Although there is strong support for the predictive and explanatory value of the TPB, there remains a large proportion of unexplained variability in individuals' behaviour. Critiques in the literature have highlighted gaps between intention and behaviour, wherein intention does not always lead to behaviour, and thus there is uncertainty regarding the mediating factors (Armitage, 2007; Armitage, Sheeran, Conner, & Arden, 2004; D. W. Johnston, Johnston, Pollard, Kinmonth, & Mant, 2004; Norman, Conner, & Bell, 1999). It is worth noting that many researchers have

augmented the TPB with additional constructs to enhance its predictive utility (e.g., self-identity, moral norms) (Godin, Conner, & Sheeran, 2005; Holland, Hill, & Cooke, 2009). Some studies have found weaker predictive relationships between intentional constructs and behaviour (Armitage et al., 2004; Norman et al., 1999), and moreover, some research indicates that past behaviour is more predictive of current/subsequent behaviour than intention (Armitage, 2007; Norman & Conner, 2006; Norman et al., 1999). Whilst some investigations include past behaviour as an additional variable in the model, other research has provided evidence that the exclusion of past behaviour would be a more accurate predictor of intention (Collins & Carey, 2007).

Recent debates in the literature were sparked by a call for the TPB to be “retired” (Rhodes, 2014; Sniehotta, Pesseau, & Araújo-Soares, 2014, p. 1). Sniehotta and colleagues (2014) reviewed previous criticisms of the TPB and questioned its validity and utility as a health behavioural change model. Specifically they claimed that self-reported measures overinflate the predictive utility of the TPB and argue that there is a paucity of “objective” experimental designs (i.e., wherein the outcomes were an objective measure rather than a self-report measure) that would not provide the same support. Additionally, they critique the predictive utility of the TPB based on the argument that the evolution of the model to include additional predictors undermines its usefulness.

In response, Ajzen (2014) refers to the number of investigations that show high rates of variance that his model has in predicting behaviour, many of which use objective outcome measures. Additionally, research indicates that the TPB accounts for approximately 20% of the variance in behaviour (Armitage & Conner, 2001). Armitage and Conner's (2001) meta-analysis of TPB-based research across various social and health-related behaviours demonstrates the predictive utility of each of the TPB constructs. These researchers highlight that although greater rates of variance can

be explained by the model when self-report measures are used, investigations using objective measures also provide support for the TPB and suggest that it can account for an average 20% of the variance explained in behaviour.

Ajzen's (2014) defence of the TPB also refutes Sniehotta and colleagues' claims that extending the TPB to include additional predictors reduces its utility, positing that extensions of the model under certain conditions are of value. Ajzen (2014) cites much previous research to refute Sniehotta's arguments providing evidence of the model's predictive utility and argues that the model does not claim to be a predictor of health behavioural change, but one that predicts intentions and related behaviours. Ajzen also posits that Sniehotta's arguments undermining the TPB's utility for interventions is simplistic. Ajzen outlines the complexity of changing underlying beliefs associated with behaviour and critiques the reliability of the intervention study reported by Sniehotta (2009).

A balanced response to Sniehotta et al.'s (2013) arguments suggested that the TPB maintains its usefulness as an explanatory framework for health behaviours, especially in so far as providing a platform on which to build knowledge of health building decision-making (Armitage, 2014). In further refuting of Sniehotta and colleague's article, Armitage points out that Ajzen promotes the use of experimental studies, and that the paucity of such research design is not the fault of the TPB nor does it undermine its validity. However, Armitage (2014) does suggest that it is limited in its capacity to fully explain human behaviour, but remains useful as a theory within a wider framework of human action and as a benchmark for other theories of human behaviour. Armitage's (2014) conclusion that the TPB is useful within a wider framework is particularly relevant for this current programme of research as it uses the TPB with the wider context of the BMHD (Bronfenbrenner & Morris, 2006).

Although there is some contention regarding the predictive value of variables within the TPB (which do vary as a function of behaviour and context), its utility to explain specific factors influencing substance use and associated behaviours has been widely acknowledged (Collins & Carey, 2007; Cooke, Sniehotta, & Schüz, 2007; Duncan, Forbes-Mckay, & Henderson, 2012; French & Cooke, 2012; Gannon et al., 2014). For instance, Duncan et al., (2012) found that the TPB explained between 57% and 77% of the variance in women's drinking while pregnant. Cooke and colleagues (2007) included anticipated regret in the TPB and found that it explained approximately 58% of the variance of binge drinking in young people. Finally, Gannon et al.'s (2014) recent examination of drink walking (i.e., walking in a public place when intoxicated) found that an extended TPB accounted for 73% of the variance in young people's intentions to drink walk. These examples are just a few of the many studies that have established the predictive and explanatory utility of the TPB with regards to alcohol and other substance use behaviours.

3.3 Cultural, Social and Psychosocial Influences Defined

As discussed above, the multitude of definitions of culture and diverging theoretical frameworks for examining cultural influences on behaviour, can make it a difficult construct to define and operationalise (Geertz, 1973; Gemignani & Peña, 2007). Bronfenbrenner's model (2006) provides a comprehensive framework that had the potential to incorporate interactions between wider social influences and more proximal psychosocial influences on women's drinking behaviours. However, due to the extensiveness of such a model, problems arise with its predictive utility, particularly as it lacks specific measurable definitions of the constructs within each system (Ennett et al., 2008). Hence, Bronfenbrenner's model was utilised as a guiding framework of the current research programme in conjunction with the TPB. The latter

facilitated a greater refinement and focussing of the lens onto specific intra-individual processes.

The BMHD can be used to incorporate the factors shown to influence women's alcohol consumption presented in Chapter 2. The chronosystem, which incorporates chronological influences, captures changing roles of women (Bergmark, 2004; Lyons & Willott, 2008) changing alcohol industry (e.g., the growth of the Australian wine industry, feminisation of alcohol, Chikritzhs, Allsop, Moodie, & Hall, 2010; 1998; Lindsay, 2006), and changes across age cohorts (ABS, 2009b; AIHW, 2011b; Kerr, Greenfield, Bond, Ye, & Rehm, 2009; Schulte, Ramo, & Brown, 2009). Wider social influences are defined as those concrete factors that are more removed from the individual, as examined in much of Measham's (Measham, 2002; Measham & Brain, 2005; Measham & Shiner, 2009) research, and could potentially include alcohol-related systems such as government policy or legislation and alcohol marketing. The Microsystem, encapsulates factors such as drinking venues (Hobbs et al., 2000; Hughes et al., 2011; Lindsay, 2006); and the women's social networks such as family, peers and spouses (Andrews, Tildesley, Hops, & Li, 2002; Brister, Wetherill, & Fromme, 2010; Galaif, Stein, Newcomb, & Bernstein, 2001; K. E. Green, Pugh, McCrady, & Epstein, 2008; Leonard & Homish, 2008). Finally, Bronfenbrenner's (2006) conceptualisation of the individual with its developmental characteristics that play an active role in interacting with its environment and subsequent individual behaviours showed the potential that an in-depth analysis of how alcohol-related beliefs and attitudes may shape alcohol-related behaviours and influence how alcohol is represented and consumed in the women's environments. The model in Figure 8, drawing upon Bronfenbrenner's framework (2006) was devised as a result of the literature review presented in chapter 2.

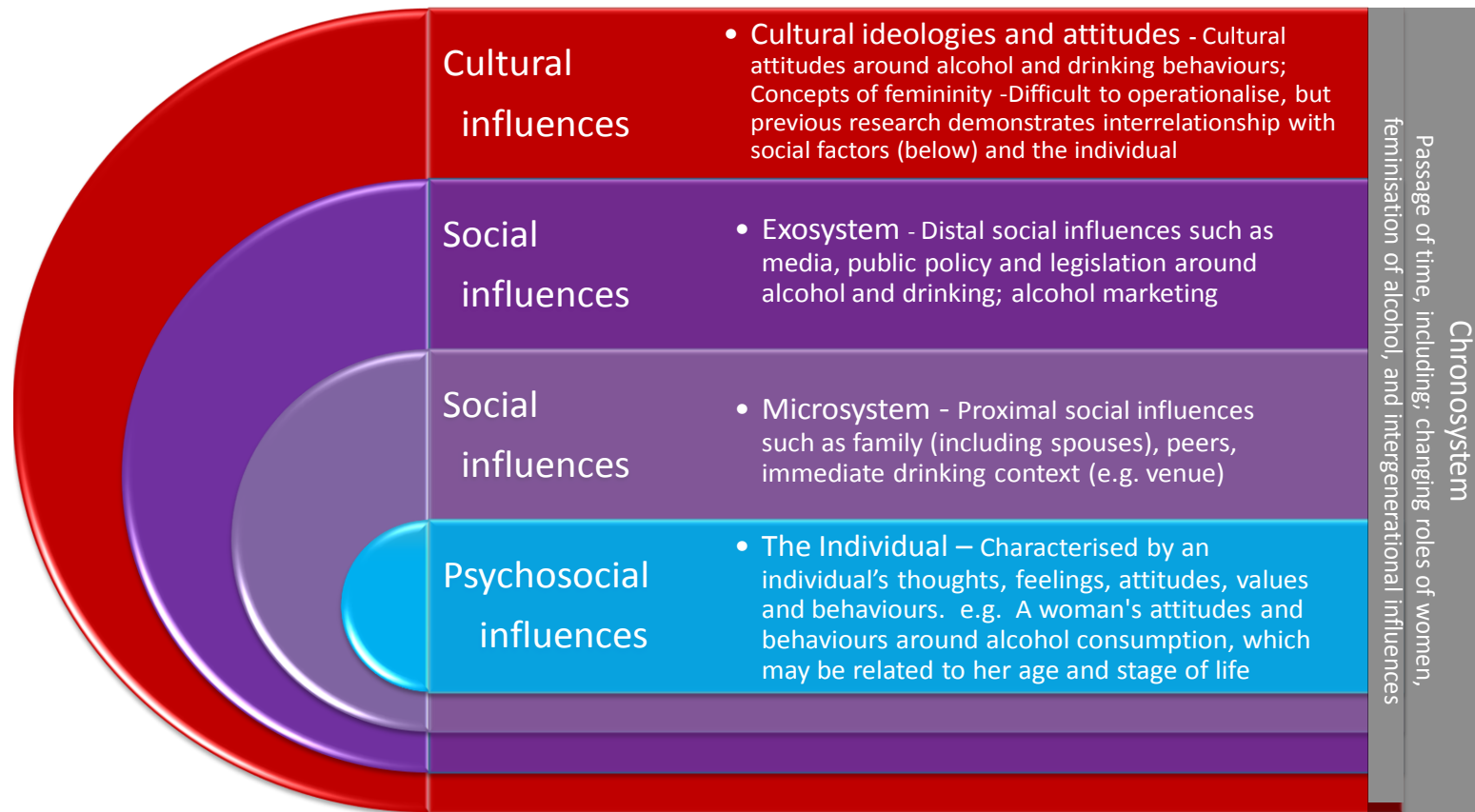


Figure 8. Definitional model adapted from Bronfenbrenner's (2006) Bioecological Model of Human Development.

3.4 Integration of Theory with the Current Research

This current chapter has outlined the two theoretical frameworks that guided this current programme of research and the rationale underlying their use. Specifically, the broader model (BMHD) was selected as a result of alcohol-related constructs evident in the existing literature and the more focussed model (TPB) was chosen to facilitate a more focussed examination of intra-individual health behaviour decision-making. In conclusion, the current programme of research was based within a psychological framework for gaining a thorough understanding of the key factors influencing women's drinking behaviour across a range of ages (18 years and above). The complementing frameworks of the BMHD (Bronfenbrenner & Morris, 2006) and the TPB (Ajzen, 1991) were chosen for their ability to provide a comprehensive picture of women's drinking by taking into account the broader more distal factors, the more proximal factors and those factors operating within the individual. The following chapter (Chapter 4) will now provide an overview of the programme of research, together with the research aims and questions.

Chapter 4 – Overview of the Research Programme

As has been highlighted in the previous chapters, three main research gaps were identified: Chapter 1 provided a summary of these research gaps. The three research gaps demand the need to: one, investigate changing trends in women's alcohol consumption; two, examine women's drinking from a multiple systems perspective; and three, examine alcohol consumption by women of all ages, not just younger women. Chapter 2 reviewed the existing literature on cultural, social and psychosocial influences on people's drinking, and while reviewing the literature available on women's drinking, also highlighted the limited evidence that is available in this field. Stemming from the existing literature, Chapter 3 outlined how two theories, Bronfenbrenner's BMHD (Bronfenbrenner & Morris, 2006) and the TPB (Ajzen, 1991), could be used to guide the research and therefore address these research gaps.

These approaches provide complementary lenses with which to examine and understand influences upon women's drinking. It was explained how Bronfenbrenner's model provided a broad lens with which to examine women's drinking at multiple systems of influence, from macroscopic (identifying cultural and wider social influences) through to microscopic and intra-individual influences; while the TPB provided a more focussed lens with which to examine the most proximal predictors of women's drinking behaviours. Consistent with these frameworks, the programme of research employed a mixed methods approach and moved from an initial qualitative phase examining a broad range of influences on alcohol consumption behaviours to a quantitative phase examining more specific and proximal influences. Chapter 4 will now present an overview of the research project, the aims and research questions and corresponding studies.

Utilising a mixed methods design was considered a strength in the current research, particularly as it facilitated a comprehensive examination of women's drinking both qualitatively and quantitatively providing both a depth and breadth of knowledge. According to Morse (2003), such an approach is considered a complementary strengths approach.

Although there continues to be discussion regarding potential epistemological and ontological tensions between the use of quantitative and qualitative methodology, the literature outlines ways in which this can be viewed that permits such possible duplicity (R. F. Hall, 2013; Hanson, Creswell, Clark Plano, Petska, & Creswell, 2005). For instance, the research paradigm that underlines the current mixed methods approach is one of “paradigm pluralism” wherein the researcher honors a varying philosophical or theoretical stances as a function of the research question and professional appropriateness within a particular discipline (Teddlie & Tashakkori, 2010, p. 9). Further detail of the ontological and epistemological approaches within the current research project is outlined in Chapter 5.

Drawing upon the strengths of a mixed methods design, the initial inductive approach facilitated the identification of factors across systems of influence in line with Bronfenbrenner's macrosystem, exosystem, microsystem and individual systems of influence. Although much literature regarding qualitative methodology determines that an inductive approach is defined by having no a priori knowledge (Merriam, 2002), there is also the perspective that having no a priori knowledge is not only impossible or unrealistic but unhelpful (Morse, 1994; Nastasi & Schensul, 2005). Further, most researchers enter a programme of research with preconceived ideas (Stenhouse, 1981) and thus, it could be argued that no research is purely inductive in contemporary science unless the researcher comes with no preconceived ideas (Meisels, 1999).

In light of these perspectives on a priori research, although guided by the systems of influence according to the BMHD framework, the research candidate conducted the inductive phase with the aim of a ground up approach⁷ by remaining open to potential themes emerging from these data. The ground up approach, with its origins in grounded theory (Glaser & Strauss, 1967), in this current programme of research was conceptualised best by the

⁷ See Chapter 5 for further detail on the methodological approach.

conceptualisation of Bradley, Curry and Devers (2007, p. 1762) who referred to such as approach as “reflecting ‘the ground’, i.e., the experiences of participants”.

Hence, Phase 1 allowed exploration of the factors that influence women’s drinking from an inductive (ground up) approach, but guided by the systems of the BMHD (Bronfenbrenner & Morris, 2006). The BMHD was chosen as a result of reviewing the literature regarding alcohol-related influences on general alcohol consumption. The BMHD, by its very nature, is broad and provides a framework consistent with multiple layers of influence, consistent with the numerous alcohol-related influences cited by existing literature.

In order to complement the breadth of the BMHD and undertake an in-depth examination of the psychosocial influences on women’s drinking, the TPB (Ajzen, 1991) was highlighted as being a potential framework to guide the second phase of the project. The TPB (Ajzen, 1991) was used to guide the quantitative investigation of the proximal, psychosocial influences on women’s drinking. Thus, the deductive approach in Phase 2 utilised the TPB to examine potential psychosocial influences. Assisted by these frameworks, the present research programme addressed the gaps in the existing literature and incorporated the aims outlined below.

4.1 Aims

The overall aim of the programme of research was to identify the key factors associated with adult women’s alcohol consumption across a wide age range (18 years and above). This scope is consistent with the age ranges in which women are shown to drink at risky levels and captures a representation of what may be occurring once drinking has legally started (AIHW, 2014). This research aimed to increase understanding of how cultural, social and psychosocial factors were associated with women’s drinking intentions and behaviours. It endeavoured to build a comprehensive picture that firstly drew upon women’s alcohol-related experiences to explore and identify influencing factors, and then understand the salience of

such factors in the alcohol consumption behaviours of women of different ages. Specifically, the aims of the programme of research were to:

1. Explore and identify key cultural, social, and psychosocial factors influencing women's drinking across a range of ages;
2. Understand and compare the importance of these influences on the drinking behaviour of women in different age groups; and
3. Develop an understanding of the relationships between these factors.

To address these aims, the research incorporated two main phases, an inductive phase utilising qualitative methodologies and a deductive phase using quantitative methodologies. The inductive phase of the research explored key cultural, social and psychosocial factors that impact women's alcohol consumption in an Australian context. The deductive phase was guided by the TPB (Ajzen, 1991) and sought to determine the salience of the key psychosocial predictors of women's alcohol consumption. Both phases included participants across a wide range of ages. The research questions addressed in the current programme of research are outlined below.

4.2 Research Questions

1. Which cultural factors (e.g., cultural attitudes and beliefs around women and alcohol) influence women's alcohol consumption?
2. Which social factors at an exosystem level (e.g., more distal factors such as media, legislation, venue policies, alcohol marketing) influence women's alcohol consumption?
3. Which social factors at a microsystem level (e.g., more proximal factors such as peer influence, family influence, drinking context) influence women's alcohol consumption?

4. Which psychosocial factors (e.g., women's attitudes, beliefs and values about alcohol) influence women's alcohol consumption?
5. What differences, between age cohorts, can be found in women's drinking behaviours and the factors influencing them?
6. What, if any, relationships between the salient cultural, social factors and psychosocial factors influencing women's alcohol consumption?

4.2.1 Phase 1 – The inductive phase - Exploration of the cultural, social and psychosocial factors impacting women's alcohol consumption.

The research and investigation undertaken in Phase 1 utilised natural observation techniques to inform semi-structured individual interviews. The participants in the interviews were aged between 18 and 55 years old as these age cohorts represented the higher and lower risk groups as shown in Figure 1 previously (see Chapter 1). Phase 1 focussed on all research questions from the wider framework of the BMHD (Bronfenbrenner & Morris, 2006).

4.2.2 Phase 2 – The deductive phase – Narrowing the lens to focus on the intra-individual psychosocial predictors of women's drinking.

Phase 2 drew upon the TPB model and the results of the phase 1 qualitative studies and explored the most salient influences on women's drinking behaviour. Thus, a survey ($N = 1069$) was developed to examine the predictive utility of the standard TPB constructs and the underlying critical beliefs associated with women's intentions to drink alcohol and subsequent engagement in three drinking behaviours (low risk drinking, frequent drinking, and binge drinking). Narrowing the lens from Phase 1, Phase 2 sought to address research questions 4 to 5 in detail, using the TPB to highlight which psychosocial factors predicted behaviour. Phase 2 (Chapters 8 and 9) focussed on the TPB informed sub-questions. Specifically, the sub-questions were as follows:

4.2.2.1 TPB-informed Sub-questions of the Quantitative Studies (Study 3)

4.2.2.1.1 Chapter 9 – The Extended TPB Model of Prediction – The Standard Constructs Analyses

1. To what extent do subjective norms, attitudes and PBC predict women's intentions to consume alcohol in harmful ways?
2. To what extent do women's PBC and intentions to frequent drink and binge drink predict engagement in these drinking behaviours?
3. Are there additional psychosocial predictors of women's drinking explaining variance over and above the standard TPB constructs?
4. To what extent do these constructs also predict engagement in these drinking behaviours?

4.2.2.1.2 Chapter 10 – The Critical Beliefs Analyses

5. To what extent do normative beliefs, behavioural beliefs and control beliefs predict women's intentions to low risk drink, frequent drink and binge drink?
6. Which of the significant predictors of intentions to engage in drinking behaviours were also predictive of actual (self-reported) drinking behaviours?
7. Are there differences in the salient beliefs which predict women's drinking across age cohorts?

Phase 2 results identified a range of key factors influencing women's alcohol consumption.

4.3 Research Design – Contribution of Each Study

The programme of research may be conceptualised in terms of two phases, a qualitative phase and a quantitative phase, which together comprised a total of three studies. The dissertation is organised into eleven chapters and presented as a thesis by monograph. However, it is important to note that a number of manuscripts currently under review in peer-

reviewed journals were based on chapters appearing in this dissertation, namely, Chapters 7, 9 and 10. The PhD candidate is the principal author of these submitted manuscripts and responsible for all aspects of manuscript preparation. The relevant sections are noted where they occur.

The mapping of the research questions to each of the studies is shown in Figure 9. Phase 1 was comprised of Study 1 (the observations and document analysis) and Study 2 (the semi-structured interviews). Phase 2 was comprised of Study 3 (the survey), which resulted in two main sets of analyses presented in Chapter 9 (examination of an extended TPB model's predictive of women's drinking) and Chapter 10 (examination of the critical beliefs underlying women's drinking). The next sections, Section 4.4 and 4.5 will summarise the three studies undertaken in this programme of research.

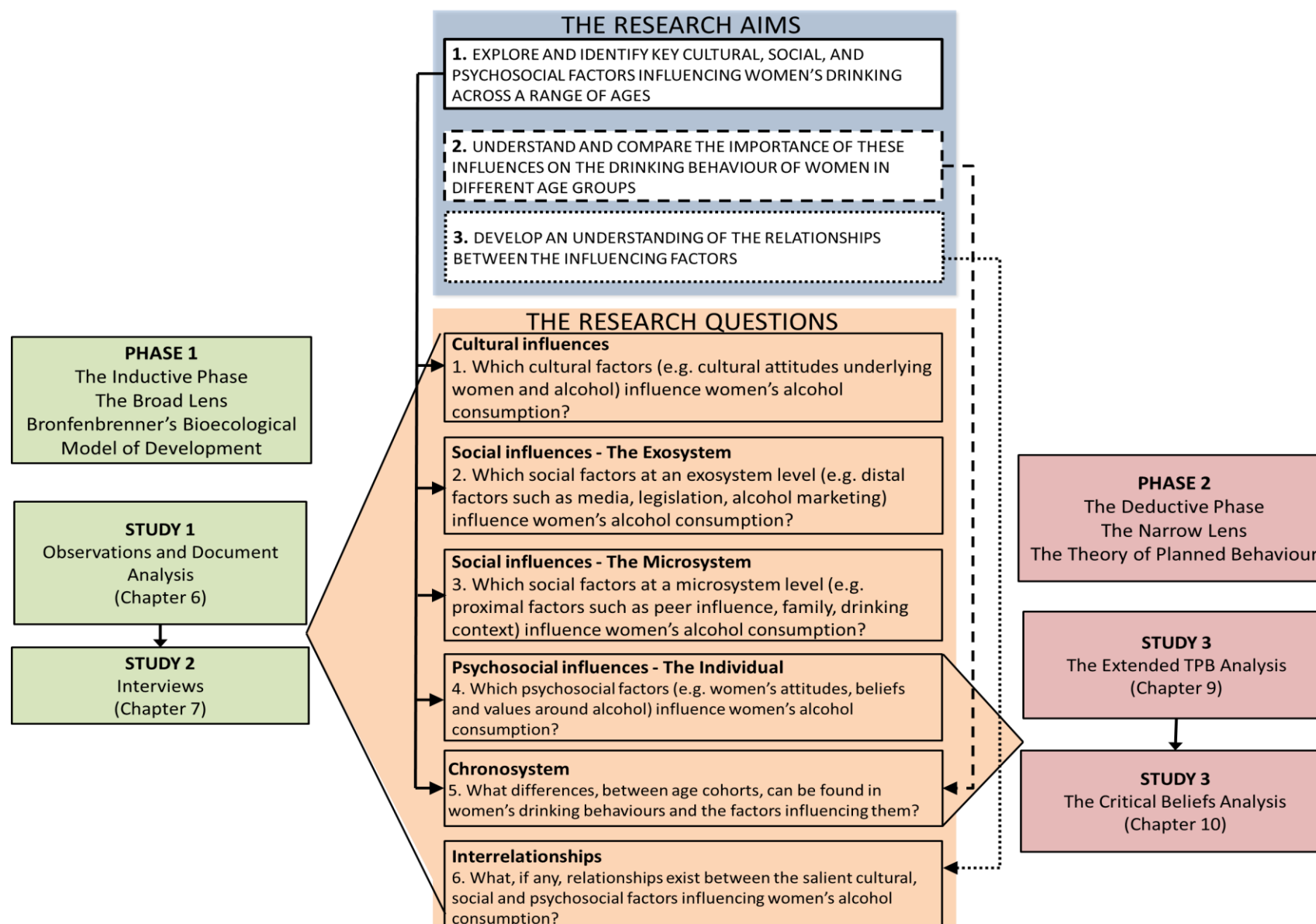


Figure 9. Overview of the programme of research.

4.4 Phase 1: An Inductive Exploration of Influences from Cultural through to Psychosocial

4.4.1 Study 1: Participant observation in public drinking venues

Study 1 was the initial exploration of cultural, social and psychosocial influences on women's drinking behaviours. Study 1 explored factors influencing women's alcohol consumption guided by the BMHD (Bronfenbrenner & Morris, 2006). Patterns of behaviour within drinking contexts were explored in order to highlight cultural, social and psychosocial factors that influence women's drinking behaviours in public locations (i.e., public drinking venues). Thus, Study 1 provided some answers to research questions one through to six (i.e., identification of cultural, social and psychosocial influences and any links between them, as well as whether there are differences in influencing factors across age cohorts).

Providing rich descriptions of women's drinking behaviours in their natural drinking settings, Study 1 draws on an ethnographic research tradition (Lawlor & Mattingly, 2001; Patton, 2002). Venues, context, peer interaction, marketing and nightclub policy and situational norms have all been shown to influence people's drinking behaviours (Measham, 2004b; Measham & Brain, 2005; Roche et al., 2008; Rosenbluth, Nathan, & Lawson, 1978). However, there is limited research around the influences on women's alcohol consumption as a result of media and marketing of alcohol and with the relatively new *feminisation of drinking venues* (Lindsay, 2006). There are relatively few observational studies which investigate women drinking in their natural settings (Lindsay, 2006), with most observing people's drinking in general (Rosenbluth, 1978). This first study then, sought to explore alcohol-related influences on women, specifically, pertaining to their drinking behaviours in various drinking venues. Further, in accordance with the BMHD (Bronfenbrenner & Morris, 2006), it aimed to analyse potential factors operating at a number of levels that may be impacting upon women's drinking.

Seven field observations of women consuming alcohol in public drinking venues were conducted across Brisbane and the Gold Coast. The observations were conducted at a range of times, in order to capture the busiest times and the range of behaviours that occurred during episodes of drinking.

As an additional component of the observational method, a targeted document analysis was undertaken. This document analysis was in the form of analysing online media (e.g., online newspapers, websites, venue marketing, social media) that pertained to each venue or event observed. An examination of online media articles (including newspapers, websites, venue marketing) that related to the observation sites (i.e., drinking venues/ events.) was undertaken subsequent to the initial observational analysis. Document analysis, as it is utilised in conjunction with this observational research, can be a form of triangulation (Denzin, 1978, 2010) wherein convergent findings from different sources or methods can increase data trustworthiness (Bowen, 2009; Nastasi & Schensul, 2005).

Addressing the paucity of information on women's drinking, the strengths of this study included examination of women drinking within a natural setting and the convergence of two methods, through the analysis of associated media and marketing content. Study 1 contributed to answering research questions one through to six, through a comprehensive examination of the macroscopic systems of influence on women's drinking. Study 2 incorporated interviews with women aged 18 to 55 years old. Study 2 is summarised below. The findings of Study 1, in conjunction with existing empirical evidence, informed the development of the semi-structured interview questions.

4.4.2 Study 2: Interviewing Women about their Drinking

Whilst Study 1 investigated influences on women's drinking from an external multiple system perspective. Study 2 allowed a greater understanding of the influences on women's drinking from the women's perspectives. Interview development was guided by the findings of

Study 1 and an adaptation of the BMHD (Bronfenbrenner & Morris, 2006) to assess multiple areas of influences from cultural through to psychosocial. One hour long semi-structured telephone interviews ($N = 35$) were conducted with women (aged 18-55) residing in Australia. The use of telephone interviews increased access to participants across varying geographical distances and permitted greater anonymity and convenience for the participants.

Open-ended questions facilitated conversation around the women's alcohol consumption, and allowed the women to describe their experiences with depth and detail (Gibson, 1998) without the interviewer leading the answers (e.g., *"Thinking about times when you drink alcohol. In your own words, please tell me about those times."*). Thematic analysis was undertaken using the constant comparative method. The Alcohol Use Disorders Identification Test (AUDIT) (Babor et al., 2001; Saunders et al., 1993) was administered at the end of each interview to collect data on the women's alcohol use.

Study 2 (the interviews) built upon Study 1 (the observations) findings to further clarify and answer research questions one through to five. Study 2 examined the multiple systems of influence (cultural, social and psychosocial) on women's drinking from the women's perspective. The interview structure gave rise to examination of all systems of influence.

4.4.3 Phase 1 summary – Transition from the inductive to the deductive approach

The inductive approach, as adopted in Phase 1, allowed an in-depth exploration of the cultural, social and psychosocial influences on women's drinking. True to a mixed methods design, this current programme of research initially utilised a ground up approach by incorporating naturalistic settings and women's perspectives on drinking behaviours. Based on Phase 1 outcomes and guided by the TPB, Phase 2 of the research explored the most salient proximal predictors of women's drinking. The two sets of analyses conducted from the survey data in Phase 2, are summarised below.

4.5 Phase 2: Surveying Women on their Alcohol-Related Decision-making

Phase 2 utilised a prospective survey design. The survey was developed in line with the TPB and Phase 1 outcomes to allow an exploration of the most salient psychological social influences on a range of women's drinking behaviours. The outcome variables were low risk drinking (one or two drinks occasionally), frequent drinking (drinking on six or more days in the one week) and binge drinking (drinking five or more drinks on any one occasion). A two-week follow up survey assessed the women's self-reported engagement in low risk drinking, frequent drinking and binge drinking and allowed assessment of the relationship between intentions to drink, PBC and engagement in these drinking behaviours. The survey data (Study 3) facilitated measurement of the constructs of an extended TPB and measurement of the critical beliefs to provide a greater understanding of women's underlying decision-making processes pertaining to their alcohol consumption. Hence, Phase 2 provided further answers to research questions four and five, but through a narrower lens of the TPB. The studies within this phase of the programme of research are summarised in the next section.

4.5.1 The Theory of Planned Behaviour, Self-Identity and Awareness (Chapter 9)

The TPB (Ajzen, 1985, 1991) has been shown to be a stable theory predicting a wide variety of health and social behaviours including alcohol consumption (Ajzen & Sheikh, 2013; Conner, Warren, Close, & Sparks, 1999; K. J. Johnston & White, 2003). The first analysis from the survey (Study 3) applied an extended TPB (including salient influences identified in phase 1 of the research), to examine the predictors of women's intentions to consume alcohol and their subsequent drinking behaviours.

This analysis answered research questions four and five, but through the lens of the TPB to examine psychosocial influences across age cohorts. With the specificity of the TPB, this analysis also tested Sub-questions 1 to 4 in its examination of: the extent to which subjective norms, attitude and PBC predict intentions to frequent drink and binge drink; self-reported

engagement in frequent and binge drinking as a function of the TPB constructs of intention and PBC; the predictive utility of other psychosocial variables identified from the phase 1 results and to what extent do these constructs also directly predict the probability of engaging in these drinking behaviours?

4.5.2 Critical Beliefs Underlying Women's Drinking (Chapter 10)

The analyses from Study 3 presented in Chapter 10 examined the extent to which underlying beliefs in relation to women's drinking predicted intentions and subsequent engagement in low risk drinking, frequent drinking and binge drinking. The critical beliefs (normative beliefs, behavioural beliefs and control beliefs) underpin a key premise of the TPB (Ajzen, 1991) and thus examination of these beliefs provided an understanding of specific drivers of drinking intentions. A three step critical beliefs analysis was undertaken, as guided by von Haeften, Fishbein, Kasprzyk and Montano (2001).

Investigation of the critical beliefs that are associated with different drinking behaviours and with different age groups facilitated comparison according to behaviour type and age group. The examination of how these beliefs mapped across behaviour and age group, answered research questions four and five, respectively, as well as testing Sub-questions 5, 6 and 7. These analyses also contributed to answering research question 6.

4.6 Chapter Summary

This chapter has described the aims, research questions and scope of the research project that forms the body of this dissertation. It also outlined how the two phases of research were informed by the theoretical frameworks of the BMHD (Bronfenbrenner & Morris, 2006) and the TPB in order to answer the research questions. A summary of the three studies was provided with details of how each study was associated with the research questions.

The next chapter, Chapter 5, presents further details of the methodological approach taken in the current programme of research. Chapter 6 presents Study 1, the observational study

(including the document analysis) and Chapter 7 presents Study 2, the interviews. Phase 2 is then is presented in Chapter 8 (Study 3 - Survey methods), Chapter 9 (Study 3 - Extended TPB analysis) and Chapter 10 (Study 3 - Critical beliefs analysis).

Chapter 5: The Methodological Approach

5.1 Introduction

So far, the preceding chapters of this dissertation have outlined the need for the current programme of research in terms of: the trends demonstrating women's increased rates of alcohol consumption (Chapter 1); factors which have been highlighted previously in the extant literature that may be influencing people's drinking and then outlining the limited research on women's drinking (Chapter 2); and then reviewed how two theories (BMHD and TPB) could help to capture and structure influences on women's drinking (Chapter 3). Finally, Chapter 4 showed how the current programme of research was undertaken to answer the research questions and aims of the research. This chapter will now provide an explanation and rationale for the methodological approaches and methods used in the programme of research.

A mixed methods approach was used incorporating two qualitative studies (i.e., observations, and interviews) and a quantitative study (i.e., prospective survey design). These three studies sequentially built upon one another, and complemented each other, to provide a comprehensive account of the key influences on women's drinking. The mixed methods approach in this current research is seen as a major strength by utilising the context in which women drink, their perspectives on their drinking behaviours and then applying a theoretical framework that assisted in the explanation and prediction of the relationships between the most salient constructs.

The value of a mixed methods approach is well recognised (Creswell, Hanson, Clark Plano, & Morales, 2007; de Visser & McDonnell, 2012; Denzin, 2010; Dumbili, 2014; Teddlie & Tashakkori, 2009). Complex phenomenon are best explored by mixed methods that provide multiple pathways of exploration (Greene, 2008), as may be exemplified when examining the changing trends of women's drinking behaviours and the influences upon such

patterns. Furthermore, mixed methods whereby qualitative methods inform quantitative methods is a useful research design to build foundations of understanding for a phenomenon which has not been explored thoroughly (Hanson et al., 2005; Nastasi, Hitchcock, & Brown, 2010).

Previous research has demonstrated the utility of mixed methods for examining the motivations underlying alcohol consumption as they are “multiple, complex and evolving” (Dumbili, 2014, p. 2841). In the current research, mixed methods provided an explanation for the meaning of women's drinking. De Visser and McDonnell's (2012, p. 621) examination of men's drinking highlighted the utility of mixed methods especially with regards to “studying complex entities like gender which operate at both macro-social and micro-social levels”. Finally, mixed methods have the advantage of being able to offset the strengths and weaknesses of both the qualitative and quantitative approaches (Dumbili, 2014). Thus, through the combining of methods it is anticipated that the collective strengths mitigate any potential methodological flaws.

5.2 Phase 1 – A Field-Based Exploration – “The Why and How of Women's Drinking”

Phase 1 utilised three major sources of qualitative data collection (i.e., observation, document analysis, and semi-structured interviews) that complemented one another and functioned to triangulate findings and thus enhance trustworthiness. Qualitative inquiry that uses multiple methods can provide a greater depth and breadth of understanding of a particular phenomenon, such as women's drinking, and enhance trustworthiness as the findings as well as the methods are triangulated (Merriam, 2002). For instance, the qualitative phase, which involved the use of observations and document analysis, and then interviews, meant that women's drinking was examined from a variety of perspectives. The observational

methods provided a firsthand encounter with women's drinking in a public venue, whilst the interviews facilitated an in-depth account of women's experiences with alcohol.

Applying Yardley's (2007) criteria for quality in qualitative health research, Phase 1 met the criteria in a number of ways. Sensitivity to Context: The research candidate's prior knowledge, both formally and through her own social interactions, was recognized through the reflexive journaling that was carried out (see Section, 5.2.1). Additionally, the observations diminished issues with regard to power in that the researchers observed in a covert manner, so that the participants were unaware that they were being observed and the balance of power was also addressed by the interviewer skills, which aimed to build rapport and set a casual friendly tone. Commitment, Rigour, Transparency and Coherence: Data collection, analysis and reporting were undertaken with rigour, transparency and coherence. For instance, the number of observations and interviews carried out was consistent with reaching data saturation and the "emergence of regularities" (Lincoln & Guba, 1985, p. 265). Further, the triangulation between observations, document analysis and interviews improved the coherence and allowed a depth of analysis that would not otherwise been achieved. When reviewing Yardley's (2007) criteria, the convergence with Lincoln and Guba's (1985) original guidelines for trustworthiness is evident. During the undertaking of the current qualitative research, the aim was to adhere to the guidelines set out by Lincoln and Guba's (1985) trustworthiness. Hence, the researcher attempted to ensure trustworthiness and credibility of the methods and data analyses, in order to provide integrity in the study. The criteria adhered to, to ensure trustworthiness and credibility are described in more detail in Chapter 6

Trustworthiness and credibility were enhanced as the candidate made use of a reflexive journal. It was in this journal that the candidate noted any biases or reactions during the qualitative processes and challenged thoughts and opinions that arose during this time. Such

reflexivity is of value and fundamental to qualitative research and provides rigour to the enquiry process, wherein acknowledgement that researcher bias cannot be eliminated but can be noted and possibly minimised. Reflexivity and an awareness of emotional and cognitive responses during the research process facilitate rigour in the methodological process (Finlay & Gough, 2008; Patton, 2002). The subsequent section (5.2.1) contains excerpts from the candidate's reflexive journal that outline her perspectives before the programme of research and how these perspectives developed further during the course of the research. The following reflexive section also outlines the candidate's ontological and epistemological viewpoints that influenced the research prior to commencement and how this adapted throughout the research process. Guba and Lincoln (1994) conceptualise ontology as the assumption that someone has about the nature of reality, and defines epistemology as assumptions regarding the relationship between the researcher and the 'object' of research or what is to be known.

5.2.1 Reflexivity

The candidate's involvement with this study started prior to the PhD project in a few ways. Firstly, the candidate was "brought to the research" and her interest in the topic was piqued because of her own background. Being a 41 year old mother of two young children, she identified herself in the emerging literature as one of the first generations of women who "partied" and "binge drank" when they were in their late teens, only to "settle down" with the advent of children to consume alcohol in a completely different, much more moderate way. Complying with Patton's (2002) recommendations, the candidate's personal history allowed her to reflect upon her own experience and realise the need to be aware of biases as she conducted and analysed the research. For instance, some stories in the interviews resonated with some of her history and thus, she needed to be aware of her own bias in interpretations.

However, the subjective element in this case may have enhanced the communication between participants and researcher.

Another instance that came out of her reflexivity was her reactions to women that had differing values to her own. An excerpt from the candidate's reflexive journal that exemplifies such accounts, states, *"It is interesting how I feel so comfortable and the rapport is built so easily with some of the women when they are telling their stories. It is a comfort to hear that they enjoy the process of talking about their drinking and that they have learnt from it. They have gained awareness. But it is also interesting when I feel less comfortable when women identify as Christian and discuss very strong views against alcohol. I become aware of my own thoughts that "They have little understanding". It is also VERY interesting that I find it slightly insulting that their judgement could be aimed at someone like me who drinks alcohol weekly. Why do I find this as a personal slight? How accepted is it [alcohol] in my life? Did my inner reaction affect the way that I communicated with her? How much of an impact may my reaction have had on the interview? I know I was aware of my reaction at the time and so slipped into counselling mode. G didn't seem to notice any difference. Subjectively, the rapport wasn't as smooth as others, but it was definitely still there. It is times like that I am grateful for my self-awareness and active listening skills."*

Negative effects from subjectivity were offset with a background in counselling and active listening communication teaching that allowed the interactions to be conducted with empathy, non-judgement and to facilitate open, honest communication. The candidate values non-judgemental interpersonal communication and at times these values were of benefit to the interactions. Such techniques are described by Kvale (1996) and Morse and Field (1995) to facilitate conversation and provide a supportive environment.

The candidate's ontological perspective was somewhat mixed and shifted throughout the programme of research. Having a background in women's studies, the candidate

originally came into the research from a feminist (critical theory) and social constructivist approach (Guba & Lincoln, 1994), wherein she was aware of the way in which women's roles in society have changed (feminist ontological perspective) and how such changes may also have influenced their initial socially constructed relationship with alcohol (constructivist ontological perspective). A feminist perspective was a filter to some extent, especially during the observational studies where the role of women and traditional representations of femininity and sexuality were quite obvious in both the clubbing environment and the document analysis.

However, the dominant ontological and epistemological perspective that pervaded throughout the research from the candidate's perspective was that of constructivism. The candidate was particularly aware of her epistemological stance during the interview phase. Although, the writing in this current thesis alludes to the social construction of alcohol consumption, throughout the programme of research the candidate felt a pressure from the dominant paradigm of positivism (Guba & Lincoln, 1994), especially from within her discipline of psychology. The candidate's work was often the result of a negotiation between her own personal paradigms and that which was demanded of from the psychology discipline.

The juxtapositions that occurred between paradigms inevitably resulted in each paradigm being challenged and ultimately reconciled with the undertaking and writing of the programme of research from a post-positivist perspective (Guba & Lincoln, 1994). This post-positivist approach is evident in the writing that recognises that biases will occur but steps have been taken to minimise biases such as through triangulation of methods and data (Guba & Lincoln, 1994). Mixed methods itself can be seen to be the methodological approach of choice for post-positivism (Guba & Lincoln, 1994).

While the paradigm shifts that occurred during the process of this programme of research may seem complex, Teddlie and Tashakkori (2010) discuss how such paradigm

shifts, especially in a programme of research using mixed methods, is often wise and necessary. That is, “paradigm pluralism calls for practitioners of mixed methods to honor a variety of philosophical or theoretical stances among their colleagues.” (Teddle & Tashakkori, 2010, p. 9). Ultimately, the value of paradigm pluralism, should be recognised in the current research. Phase 1 allowed for an exploration of cultural and societal influences and the meaning ascribed to alcohol consumption by individual women, while the use of quantitative methods in Phase 2 allowed for a theoretical-based deductive examination of the factors associated with drinking across a wide range of women.

Hence, the methods chosen in Phase 1 allowed the candidate to gain a rich understanding of the meaning that drinking and alcohol had in women’s lives in an Australian context. Given the relatively limited amount of research on this topic and the potential of cultural and social influences, an initial field-based approach was deemed appropriate, wherein observations and interviews provided a ground up exploration, Phase 1, of which factors may be influencing women’s drinking. The key factors emerging in Phase 1 were further examined through the use of survey design to explore the extent to which these factors impacted upon the broader female population in Phase 2 of the programme of research.

Whilst much literature regarding qualitative methodology determines that an inductive approach is defined by having no a priori knowledge (Merriam, 2002), there is also the perspective that having no a priori knowledge is not only impossible or unrealistic but unhelpful (Morse, 1994; Nastasi & Schensul, 2005). Regardless of the literature, it would be difficult for research to be truly defined as purely inductive, as most research needs to have some a priori knowledge so that gaps in the knowledge can be addressed. Most researchers enter a programme of research with preconceived ideas (Stenhouse, 1981), unless the research is truly from a “going native” approach, wherein a researcher enters into a culture with no knowledge what so ever, just as Jane Goodall did when she challenged scientific

enquiry by infiltrating chimpanzee social networks (Altamirano-Jimenez; Goodall, 1986). Hence, it could be argued that no research is purely inductive in contemporary science unless the researcher comes with no preconceived ideas (Meisels, 1999). So, regardless of using Bronfenbrenner's (2006) model as a guiding framework, the candidate's immersion in Australian culture and her participation in social situations involving alcohol mean that Phase 1 of the current study could never have been purely inductive.

On the contrary, almost from an emic perspective (Headland, Pike, & Harris, 1990) the insider knowledge that the candidate brought to the programme of research would probably have benefitted the research (Altamirano-Jimenez; Beckerleg & Hundt, 2004; Stenhouse, 1981) (e.g., empathising with women's experiences and decreasing participant social desirability bias, awareness of potential experiences and knowledge, awareness and interpretation of the language used, meaningful interpretation of data). The emic or insider approach has a focus on the perspectives of the participants being examined, and so puts aside prior knowledge in order to find meaning in the data that emerge from the participants' words or behaviours or contexts (Headland, Pike, & Harris, 1990). Emic approaches, for instance in participatory observations, facilitate a richer "less intrusive" interaction with participants and a more meaningful interpretation of the data (Beckerleg & Hundt, 2004; Headland et al., 1990). Such benefits have been particularly evident in research regarding substance use behaviours (Beckerleg & Hundt, 2004).

Phase 1 of the current programme of research is therefore guided by Nastasi and Schensul's (2005, p. 183) "role of theory and knowledge" whereby the doctoral candidate's main aim was to observe and understand women's drinking through naturalistic inquiry, while she remained open to any and all themes that emerged from the data. Although data collection was guided by Bronfenbrenner's (2006) model, key themes were allowed to emerge through a thorough, in-depth exploration not presuming nor excluding any potential

factors and maintaining an openness to adapt or discard the model if necessary. Such adaptation can be seen with a focussing in on the more immediate factors influencing women's drinking as a result of the interview data.

5.2.2 The Observations and Document Analysis (Study 1)

The observation and document analysis were conducted as concurrent studies. The document analysis as guided by Bowen (2009) examined and interpreted online media articles (including newspapers, websites, venue marketing) that related to the observation sites (i.e., drinking venues/ events.) once initial observational analysis had been undertaken. That is, online media articles that related to the venues/ events under observation were searched for and selected for analysis especially with regard to their portrayal of women. The criteria for selecting the articles was that they were published or released within three months of the observation visit and pertaining to one of the seven events/ establishments visited. Themes that arose from the analysis were compared within each of the observed venues and across venues. The “image” that each venue wanted to convey to potential customers that included depictions of expected clientele and normative behaviours and how they pertained to women's drinking were explored in this analysis. See Table 7 for detail of the series of steps taken in conducting this study.

When selecting venues as observation sites the following factors were taken into consideration: location, event type (e.g., pub, club, wine bar), day of the week and current social/ cultural events (e.g., schoolies⁸, Melbourne Cup⁹). This purposeful sampling of a

⁸ Schoolies is an Australian celebration in which high school leavers celebrate the end of their formal schooling with parties and holidays together and represents an adult-free time. There is a history of excessive alcohol use and risky behaviors as a result of young people (average of 17 to 18 years old) being intoxicated. Subsequently, there has been a harm reduction focus

variety of venues (e.g., cafe bars, pubs, nightclubs, cultural events) and events was applied with the aim of maximising observation of behaviour in a variety of contexts. Specifically, the aim was to visit a range of venues and to note as much of the environment and women's actions as possible. Purposeful sampling relies on selecting fields of data (e.g., observation fields, participants) that provide information-rich cases for in-depth study (Patton, 1990). Detail of the steps taken in the combined observational and document analysis study are outlined in Table 7.

Advantages of observational methods have been highlighted in the literature and, with particular relevance to this current research, include the ability to assume the role of an insider and explore the behaviours of the participants in their natural setting. Baker (2006) outlines the different roles that an observer can potentially play, including peripheral or moderate membership, which is the membership type most similar to the observer role undertaken in the current study. The peripheral observer maintains a balance between insider and outsider, or between participation and observation by engaging in similar activities within the context, but not engaging in the core activity that may stand at the core of the

from local councils, governments and community organizations to prevent substance-related harms (Maticka-Tyndale, Herold, & Oppermann, 2003; Queensland Government, 2015).

⁹ The Melbourne cup is Australia's most popular horse racing event that incorporates many individuals attending race courses (estimated to be 100 000) across Australia as well as more than half of the Australian population watching the race live through electronic media. It is marketed as the 'race that stops a nation' and highlights the widespread betting and events that take place, often backed by public holidays in its host city of Melbourne (Lemon, 2012). It's importance is set as a cultural event that helps to form national identity (Digance & Cusack, 2009).

membership (Baker, 2006). For example, in the current study the observers ate and drank and wandered around in drinking venues, but did not consume alcohol. Adler and Adler (1987) put forward two main advantages to this peripheral member approach: it facilitates a detached perspective which some epistemological approaches state as being necessary for data interpretation and means that the researcher does not have to partake in activities that they do not wish to. For instance when Adler and Adler (1987) carried out research on drug trafficking they regularly socialised with people dealing drugs but did not engage in drug trafficking. A problem that may arise in observational studies, and which was a problem somewhat evident in the current study, is that the observer may be excluded on the basis of age or gender or normative expectations.

5.2.3 The Interviews (Study 2)

Recruitment of women for the interviews primarily occurred as a result of a media release promoting the research, which prompted national radio interviews, with some additional snowballing as participants were asked to pass on the research details if they knew of anyone that may also be interested in participating. Initially the only criteria for recruitment was that participants were female and between the ages of 18 and 55 years old. The main aim was to recruit women of a range of ages and possessing a range of drinking behaviours from abstinence to heavy drinking. However, after a number of individual interviews ($n = 30$) there appeared to be three women who identified as Christian and whom did not drink alcohol and were likely to have heard about the study via the snowball sampling of friends/peers holding similar views regarding alcohol and drinking. Hence, in order to gain a range of drinking behaviours and to ensure close to equal sampling across age groups, screening questions included, “What is your age?” and “How much do you drink?” were asked for the remaining interviews.

Although the initial convenience sampling was appropriate due to cost and efficiency, it proved to be somewhat less rigorous. Hence, the switch to a more purposive sampling approach for age and drinking types (i.e., targeting younger women who drank alcohol, and excluding the Christian friends of one of the participants) benefited the research by facilitating some selective variation in the responses. That is, the choice of participants facilitated a range of responses needed to provide an in-depth exploration of a range of drinking attitudes and behaviours that occurred within women of a range of ages. Such sampling techniques have been shown to be beneficial to qualitative research, often with overlap occurring between convenience and purposive sampling (Marshall, 1996). The age groups targeted, facilitated comparisons between cohorts most at risk (18-24; and 35-55) and least at risk (25-34) (ABS, 2009b, 2012a; AIHW, 2008) in Australia.

Originally 36 women were interviewed, but one participant's data were excluded as there were concerns about the validity of her responses. The participant often went off-topic and was unable to remain focussed on the topic of discussion. Her answers could not be analysed. As a result, semi-structured telephone interviews, of 45 – 70 minutes duration, were conducted with 35 women (18-55 years) residing in Australia. The mean age of the women interviewed was 31 years. Table 6 below highlights the main demographic characteristics of the women interviewed. To compare these characteristics with Australian national data, percentages of women aged 15 to 74 years, 17.2% have attained high school certificates, 27% have diplomas beyond high school, 17.5% have an undergraduate degree and 5% have postgraduate degrees (ABS, 2014), In 2011 Australian marital status for women aged 15 years and above were: Never married = 31.4%; married = 47.6%, divorced/separated/widowed = 21% (ABS, 2012b).

Table 6

Sociodemographic Characteristics of the Participants in Study 2 and Study 3

| | Income bracket (pa) | Education Level | AUDIT – Drinking assessment | Marital Status |
|-------------------|-----------------------------|-----------------------|-----------------------------|---|
| Interviews | \$0 – \$7 800pa ($n = 0$) | High school (30%) | Non-hazardous (45.7%) | Single (40%) |
| $N = 35$ | \$7 801 - \$20800 (22.9%) | Diploma (24%) | Hazardous/Harmful (34.3%) | Relationship, not living together (11.5%) |
| Aged | \$20 801-\$41 600 (14.3%) | Undergraduate (26%) | Alcohol dependence (20%) | Defacto/ Married (40%) |
| 18 – 55 years | \$41 601-\$62 400 (14.3%) | Postgraduate (20%) | | Divorced/ Separated (8.5%) |
| ($M = 31$ years) | \$62 401-\$83 200 (17.1%) | | | Widow ($n = 0$) |
| | \$83 201 –\$104 000 (2.9%) | | | |
| | \$104 001-\$156 000 (20%) | | | |
| | \$156 000 + (8.5%) | | | |
| Main Survey | \$0 – \$7 800pa (6.3%) | High school (28%) | Non-hazardous (61.6%) | Single (32.1%) |
| $N = 1069$ | \$7 801 - \$20800 (15.3%) | Diploma (16.1%) | Hazardous (30.6%) | Relationship, not living together (10.2%) |
| Aged | \$20 801-\$41 600 (13.7%) | Undergraduate (31.5%) | Harmful (4.6%) | Defacto/ Married (50.4%) |
| 18 – 87 years | \$41 601-\$62 400 (11.5%) | Postgraduate (24.4%) | Alcohol dependence (3.2%) | Divorced/ Separated/ Widowed (7.3%) |
| ($M = 35$ years, | \$62 401-\$83 200 (13.9%) | | | |
| $SD = 13.7$) | \$83 201 –\$104 000 (12.4%) | | | |
| | \$104 001-\$156 000 (14.5%) | | | |
| | \$156 000 + (11%) | | | |
| | 14 (1.3%) Did not answer | | | |

The main themes from the observation study guided the development of the interview schedule for the subsequent individual interviews (Study 2, see Appendix C). Open-ended questions facilitated conversation around the women's alcohol consumption, and allowed the women to describe their experiences with depth and detail (Gibson, 1998) without the interviewer leading the answers. However, the interview schedule was semi-structured so as to explore the potential for Bronfenbrenner's (2006) systems of influence.

Advantages of telephone interviewing, in comparison to face-to-face interviewing, have been highlighted in the literature and include: accessibility (geographically and with special populations) and increased ability to broach sensitive topics because of physical distance (Musselwhite, Cuff, McGregor, & King, 2007; Opdenakker, 2006). In the current study, the use of telephone interviews increased access to participants across varying geographical distances as well as access to women with children whom could participate while in the comfort and convenience of their own home. Two main disadvantages of telephone interviewing are the lack of interpersonal cues due to a lack of physical contact (Opdenakker, 2006) and the reliance on self-report, which brings with it potential social desirability bias (Crowne & Marlowe, 1960). The women interviewed may have underreported their drinking as is a common occurrence in such self-reported data (Rundle-Thiele, 2009; Stockwell et al., 2004). However, the use of telephones can increase the feeling of anonymity as women discussed their alcohol consumption. The lack of physical interpersonal cues was compensated by the interviewer's (the research candidate) prior experience as an interpersonal communication lecturer, a telephone counsellor, and a registered psychologist. Such experience allowed the interviewer to convey empathy and use active listening skills to build rapport, create a secure confidential environment and facilitate open communication. Analysis of the interview data was consistent with the constant comparative method as guided by Boeije (2002). The constant comparison method is carried out by the selecting and comparing of units, codes, and classifications within and across sets of data in order to

answer the research questions (Boeije, 2002; Glaser & Strauss, 1967). The comparison is a form of internal validity wherein the researcher looks for commonalities and differences in behaviour, reasons, attitudes, perspectives etcetera (Boeije, 2002). Thus, in the current study, units of meaning were compared with each other within interviews, across interviews, and across age groups and then larger units of meaning (e.g., themes) were compared in a similar manner until higher order themes were identified. Using the constant comparative method (Boeije, 2002; Glaser & Strauss, 1967) to analyse the data within and across the interview transcripts, the findings then informed the direction and content of the survey design for Study 3

5.3 Phase 2 – A Prospective Design to Build upon Initial Findings – “To What Extent do Psychosocial Factors Influence Women’s Drinking?”

The prospective design survey (predominantly distributed online) which was used within Study 3 allowed the most salient variables to be examined within the broader population. Phase 2 facilitated theory building and testing and assessed the generalisability of the variables that were revealed in Phase 1. The prospective design assessed the psychosocial influences on women’s intentions to drink (Time 1) and then measured the extent to which these factors influenced self-reported engagement in three types of drinking behaviour (low risk, frequent drinking and binge drinking) (Time 2; two weeks post).

The benefits of prospective design surveys are that they reduce researcher bias by examining influencing factors and then how such factors may be related to behaviours at a later date (Parry & Watts, 2013). That is, the researcher records the outcomes at time one without knowing what the outcomes will be at time two. The disadvantages of prospective design surveys are: when a person is being studied (surveyed), this observation may change their behaviour (i.e. The Mere Measurement Effect, Morwitz, Johnson, & Schmittlein, 1993); large sample sizes are needed; and prospective design surveys are inefficient when they involve rare disorders as they are too difficult to capture (Parry & Watts, 2013). Whilst The Mere Measurement Effect may have, in part, influenced subsequent self-reported behaviours,

the other two disadvantages Parry and Watts (2013) discuss were not a problem for the current study. Firstly, the large sample size was a strength of this survey as 1069 women completed the survey at Time 1 and 845 (79%) of these women also completed the follow-up survey at Time 2. Secondly, alcohol consumption is widespread in Australia (ABS, 2009) and thus information regarding this behaviour was readily accessible. Hence, the large sample size and common use of alcohol meant that there was sufficient variability considering attrition rates that often occur with such research designs (Hakim, 2012). A final limitation of the prospective survey design is recall bias (Hassan, 2005). However, the current research study used a standardized assessment tool to measure drinking behaviour, which has been shown to reduce recall bias (Hassan, 2005). Further, the large sample size and the moderately short period of two weeks also mitigated such biases. The two week follow-up was considered the most appropriate timeframe to facilitate the most accurate and generalisable data generation. Two weeks provided sufficient time to capture possible variations in behaviour, but not so much that recollection of drinking episodes would be unreliable. Overall, the disadvantages of prospective survey design were mitigated and the benefits of such a design allowed examination of relationships between psychological variables and behavioural outcomes, thus identifying constructs related to high risk drinking behaviours. As with the preceding phases, participant recruitment was once again initiated by a media release (e.g., nationwide radio and newspaper interviews) and through subsequent snowballing.

Whilst the majority of participants were from the broader Australian community ($n = 959$) an additional 110 participants were first year students recruited at a large Australian university. Much research has been conducted on students as their tendency to consume alcohol is well known (Day-Cameron, Muse, Hauenstein, Simmons, & Correia, 2009; Neighbors et al., 2008; Ravis & Sheeran, 2013). Recruitment of the first year students was to enable examination of younger women's drinking. Convenience sampling of students is common practice as it facilitates examination of younger people. Although some research

indicates student populations are at higher risk of binge drinking compared to non-student populations, other research demonstrates that there may have been measurement problems and evidence actually points to similar levels of alcohol consumption across student and non-student populations (Bekman, Brumback & Goldman, 2007; Timberlake, et al., 2007).

The majority of the student population recruited in the current study were younger (i.e. 77% were 18 to 24 years old) thus ensuring examination of young women's drinking experiences. Hence, to compare student and community populations, subsets of all of the 18 to 24 year olds from each sample, were retained for subsequent t test analyses. That is, in order to examine potential differences between the two populations (community (non-student) and university student) tests were conducted comparing mean scores of these 2 groups of younger people upon a range of the study's key outcome and predictor variables. The results revealed that there were no significant differences between the student and community populations of young women on income, AUDIT scores, intentions to low risk drink, intentions to frequent drink and intentions to binge drink. Thus, it was felt appropriate to collapse across the community (non-student) and university samples given that no systematic differences were found between the student population and the broader community population of younger women.

In order to make sure the survey was accessible to all participants (particularly older participants) hard copy questionnaires ($n = 20$) were provided to women who preferred to fill out a hard copy rather than an online survey. The data from the hard copy surveys were included with the online samples. This decision to collapse across the methods was based on checks which were conducted to determine if there were any potential differences between participants who completed either the online or paper version of the survey. No significant differences on any of the key socio-demographic factors examined were found (e.g., education, AUDIT between online and paper versions) and therefore responses from the two

survey versions were combined. Chapter 8 presents the details of the methods for Phase 2, Study 3, the quantitative phase.

5.4 Concluding Remarks

The mixed methods approach of the current programme of research was a strength of the research as it acknowledged and reduced bias (e.g., as seen in the reflexive journal). Such an approach facilitated a comprehensive examination of women's drinking both qualitatively and quantitatively providing a depth and breadth of knowledge, and utilized a broad variety of recruitment strategies to maximise representation. The participants' demographics highlight the broad spectrum of women interviewed and surveyed (See Table 6 for an outline of the main demographic characteristics of the participants). Chapter 6 will now present the observational study (Study 1) in detail.

Chapter 6 - Phase 1: Study 1 – Participant observation in public drinking venues

6.1 Background and Aims

Drawing on the current literature, Study 1 aims to highlight factors influencing women's alcohol consumption guided by the BMHD (Bronfenbrenner & Morris, 2006). Shared patterns of behaviour within such drinking contexts are explored in order to highlight cultural, social and psychosocial factors that are influencing women's drinking behaviours in the public sphere.

Providing rich descriptions of women's drinking behaviours in their natural drinking settings, draws on an ethnographic research tradition (Lawlor & Mattingly, 2001; Patton, 2002). Venues, context, peer interaction, marketing and nightclub policy and situational norms have all been shown to influence people's drinking behaviours (Measham, 2004b; Measham & Brain, 2005; Roche et al., 2008). However, there is limited research around the influences on women's alcohol consumption as a result of media and marketing of alcohol and with the relatively new *feminisation of drinking venues* (Lindsay, 2006). Further research is therefore needed to study the effects of these environments on women's drinking behaviours. Much value is ascribed to understanding obtained through observing socially occurring phenomena within their naturally occurring settings (Patton, 2002). Hence, an observational study was deemed the most suitable for the research questions in the initial phase of the programme of research.

6.2 Ethnographic Methodology

Angrosino (2007) argues that it is important to use inductive methods, such as observation, when studying groups of individuals functioning within certain contexts and this notion is especially pertinent in ethnographic studies. Ethnographic studies can be defined in terms of researching and describing a particular human group operating, often in a fairly routine way, within certain contexts or institutions (Angrosino, 2007). Ethnography is

primarily conducted on-site by observing human behaviour and the interactions occurring within a particular context with the aim of interpreting descriptive detail into predictable patterns of group behaviour (Angrosino, 2007; Collingridge & Gantt, 2008). Collingridge and Gantt outline the importance of ethnography in understanding behaviours and attitudes of cultural groups in a health setting. They describe how natural observation can allow the researcher to look from the inside of a particular context in order to gain a better understanding of the culture and the associated meanings.

In accordance with Bronfenbrenner's BMHD (Bronfenbrenner & Morris, 2006) Study 1 aims to analyse potential factors operating within systems of influence that may be impacting upon women's drinking. The candidate, as observer in this current study, entered the context as a "peripheral member" (P. A. Adler & Adler, 1994, p.379) and thus an ideal balance is maintained between participation and observation (Baker, 2006). Peripheral members are defined as interacting with the population being studied, engaging in similar activities, but detached enough so that they are not partaking in the core behaviour examined (P. A. Adler & Adler, 1994) (e.g., not consuming alcohol).

The few studies that have used observational methodology to research alcohol consumption in nightclubs focussed on specific factors, such as class and gender (Lindsay, 2006) and actual versus claimed consumption (Rundle-Thiele, 2009). Study 1's observations incorporate nightclubs and public bars (pubs), but also, in the context of sporting and cultural events. Using observations of women's behaviour in a broader range of contexts allowed further insights into women's behaviour within public drinking venues and the factors that may be shaping their behaviours. The selection of venues targeted variance in venue type across two main Brisbane nightlife areas plus two events that represented large cultural events during a three month period (Schoolies and Melbourne Cup day). Although schoolies is officially recognised as a younger non-alcoholic event, the reality is that many young

people (approximately aged 17 to 20) convene around schoolies sites to drink in excess and is seen as a cultural rite of passage that was deemed important to capture in the current research.

As an additional component of the observational method, a targeted document analysis was undertaken. This document analysis was in the form of analysing online media (e.g., online newspapers, websites, social media) that pertained to each venue or event observed. To ensure relevance, the criteria for selecting the articles was that they were within three months of the observation visit and pertaining to one of the seven events/establishments visited. The advertising and media articles associated with each of the observations represent artefacts that inform the research context more fully. That is, such images assist in showing representations of women's drinking and the messages that are being conveyed in advertising and media for their consumption. Such alcohol-related images and documents represent: how substance use is expressed in a culture at a given point in time; the sources that are potentially internalised in people's knowledge, norms and values; and cultural messages that portray which behaviours are permitted or forbidden and by whom (Hellman & Einstein, 2015). Document analysis, as it is utilised in conjunction with this observational research, can be a form of triangulation (Denzin, 1978, 2010) wherein convergent findings from different sources or methods can increase data trustworthiness (Bowen, 2009; Nastasi & Schensul, 2005).

The observations and document analysis aimed to provide insight into the numerous and varied potential alcohol-related influences of:

- peer interaction and communication
- the physical environment on behaviour
- marketing and advertising of alcohol
- cultural factors such as cultural celebrations
- venue policy e.g., closing time, dress code, security
- gender role behaviour and drinking behaviour

- venue/ event marketing
- the type of client attending an establishment
- other factors that emerge

Reflexivity refers to the awareness of the researcher to reflect back on oneself as a research tool (Lincoln & Guba, 1985). Reflexivity promotes rigour in qualitative research by acknowledging the active role that the researcher has within the design of the research, collection and interpretation of the data and reporting of the findings (M. Dowling, 2006; Jootun, McGhee, & Marland, 2009; Patton, 2002). In acknowledging the role of the researcher (Patton, 2002), the stance of the PhD candidate is discussed in Chapter 5. During the observations, the researchers involved in the observations (the PhD candidate and research assistant) noted their thoughts, feelings and comments alongside observational descriptions. These notes informed the findings when relevant, such as when discomfort was felt by the PhD candidate due to her age and as her presence amongst a group of younger people broke situational norms. Such notes are important in participatory research wherein the researcher's experience informs the ethnographic data (Genzuck, 2003; Nightingale & Cromby, 1999).

6.3 Study 1 Method

Ethical approval for Study 1 was granted by the Human Research Ethics Committee – QUT (Project Number: 1000 000 756). Purposeful sampling of a variety of venues (e.g., cafe bars, pubs, nightclubs, cultural events) and events was applied with the aim to maximise observation of behaviour in a variety of contexts. Purposeful sampling relies on selecting fields of data (e.g., observation fields, participants) that provide information-rich cases for in-depth study (Patton, 1990). Seven field observations of women consuming alcohol in public drinking venues were conducted across Brisbane and the Gold Coast. Pilot questioning of women around venues and a previous study (Armstrong et al., 2010a; 2010b) gave rise to a

number of venues and events that were deemed appropriate. Table 7 sets out the steps undertaken in Study 1.

Table 7

Methodological Procedure for Study 1

| Step | Procedure |
|------|---|
| 1 | Venues were chosen and an online search provided information on upcoming events, opening times etc. No analysis had commenced at this stage. |
| 2 | <p>A research assistant and the researcher visited the venues or nightclub districts and attempted to 'blend in' to the environment as much as possible (e.g., sitting at a table drinking a drink, ordering food). Hence, the researcher played the role of a participant observer (Patton, 2002) to a large extent, but without drinking alcoholic beverages. Descriptive notes were taken of the physical settings including the marketing and of the interactions of women with the environment and with others in their environment. The notes were written in a table (see Appendix D) which allowed room for direct observation and a column where inferences or reflexive notes (e.g thoughts, feelings and comments) could be recorded. These reflexive notes informed the findings when relevant, such as when discomfort was felt by the PhD candidate due to her age and as her presence amongst a group of younger people broke situational norms. Such notes are important in participatory research wherein the researcher's experience informs the ethnographic data (Genzuk, 2003; Nightingale & Cromby, 1999).</p> <p>The notes were taken across the time course of the observation without analysis, but discussion between researcher and research assistant took place with regard to indicating activities of interest. The researchers stayed in each venue until just after the end of the event (e.g., end of the Melbourne Cup event, pub closing time) or until saturation had occurred for that venue.</p> |

| | |
|----|--|
| 3 | Once all observations had taken place the first level of analysis was undertaken for each of the seven field sites. That is, the written descriptions for each observation were coded into units of meaning and exploring patterns of behaviour. As discussed in Step 2, the reflexive notes were a possible source of additional information, but also facilitated an increased awareness of possible biases during the analysis. |
| 4 | Peer debriefing between researcher and research assistant took place to enhance credibility. Most coding was agreed upon, with divergences in analysis being set aside for discussion with a third party (i.e., research candidate's supervisors). During this step, the researchers exchanged descriptive notes to check if any important descriptions had been overlooked. |
| 5 | After first level analysis (within venues) a further analysis was undertaken to recognise patterns across venues. Contrasts and similarities between observation sites were noted. |
| 6 | A further debriefing between research assistant and research candidate took place to discuss the second level of analysis. |
| 7 | The researcher chose and downloaded media examples and marketing relevant to each venue and event. |
| 8 | A content analysis of the images looking for themes and patterns within and across venues was undertaken. For instance, the main messages of the image and the underlying content was described and then compared with other images and with the preliminary results of the observational study. |
| 9 | A final analysis developed the codes into higher order themes and incorporated findings from the document analysis (e.g., cultural findings represented from observations and document analysis). |
| 10 | A final peer debriefing was conducted with the research candidate's supervision team. |

The observations occurred at a range of times, in order to capture the busiest times and a range of behaviours that occurred during episodes of drinking. The observations took place in the two major nightclub areas of Brisbane ('the city' and 'the valley') as well as during cultural events (e.g., National Rugby League Grand Final night; "Gold Coast schoolies"; Melbourne Cup). Appendix E has a description of each venue/context and the time that the researchers spent at each observation site recording data. The researchers (candidate and research assistant) participated in events by consuming food and non-alcoholic beverages and attempted to undertake covert observation. Using pen and paper each researcher independently noted descriptions of: the physical settings of the venue; clientele demographics (best guess) including appearance and dress; activities or entertainment; interactions between clientele; interactions between women and their environment (e.g., the venue) and, of course, descriptions of women's behaviour. Peer-debriefing was conducted after each observation between the candidate and the research assistant to review what was seen and experienced in the observation. This peer-debriefing served an important function in terms of providing a second opinion about how the observation process went and to identify any important topics that might have been missed.

Upon completion of the observations, and prior to any analysis, the descriptive notes were exchanged to allow discussion around important observations that occurred. Such peer-debriefing enhances credibility (Lincoln & Guba, 1985; Nastasi & Schensul, 2005). A methodological strength was the candidate's immersion in the data because she carried out multiple roles in its collection, analysis and reporting. Credibility, as described by Lincoln and Guba (1985) was heightened by an ongoing peer-debriefing process, and triangulation (Denzin, 1978, 2010), in terms of including a document analysis (Bowen, 2009; Genzuk, 2003).

Broadening the observational method, the document analysis was guided by Bowen (2009) who describes document analysis as often being data selection rather than data

collection that broadens the scope of, and triangulates, the findings. That is, online media articles (including newspapers, websites, venue marketing) that related to the venues/ events under observation were searched for and selected for analysis. The analysis of the main advertising forums (e.g., social network sites like Facebook ^(TM); online flyers; venue websites) for each of the observed venues was also conducted to explore the “image” that each venue wanted to convey to potential customers and complete the picture of expected clientele and normative behaviours related to each venue.

Descriptive data were set out in a tabulated form as guided by Goodrick (2010). This approach assisted with the thematic analysis of the observational and documental data to add the initial level of interpretation. An example of this analysis in a tabulated form (Goodrick, 2010) is presented in Appendix D. Themes were coded from the raw descriptions of each of the seven observations giving rise to seven data sets. Using the constant comparative method (Boeije, 2002; Glaser & Strauss, 1967), these themes were then compared across data sets for the purpose of extracting higher order themes. The constant comparative method was guided by Boeije (2002), wherein each data set (from each of the observations) was searched for units of meaning and compared with other units within each observation. These units were then compared across data sets and coded into a high level of themes. Eventually, these larger units of meaning were compared across observations. A similar process was undertaken when searching for themes within each image in the document analysis. Overall units of meaning and themes were looked for which highlighted commonalities and difference between themes and between observational sites (including how the images represent the observational site). These themes were discussed after each level of coding, in line with peer debriefing techniques that enhance credibility (Lincoln & Guba, 1985; Nastasi & Schensul, 2005). Key target behaviours pertaining to research questions one to four were addressed. The thematic analysis elicited the main themes that highlighted patterns in the women’s behaviour during the drinking occasion and the contexts in which they were carried out.

6.4 Findings and Discussion

After consideration it was decided that presenting the findings and discussion in the one section would facilitate a clearer explanation of the key outcomes of the study. In contrast to quantitative research, where results can be clearly presented in a discrete section, the findings from qualitative studies are often intimately linked to the discussion.

Understanding the findings often leads naturally into an interpretation of the findings and thus integration of the findings and discussions. This section addresses the first four research questions in Phase 1 by presenting: overarching themes; themes emerging at different layers; behaviour as a function of time and intoxication; differences as a function of age. Figure 10 conceptualises the themes in terms of factors influencing women's drinking. The summary of themes is put forward in this section with supporting evidence of specific observational examples.

The impact of various systems of influence (e.g., exosystem, microsystem, psychosocial) in an Australian culture was evident in the observations. The findings showed that one drinking event incorporated influences that filtered through from wider cultural and societal levels through to affecting the attitudes and behaviours of women at an individual level. Specifically, connections were evident between cultural influences (culturally defined gender roles, national identity and cultural celebrations); exosystem influences (media, marketing, legislation and policy); microsystem influences (venue policy and marketing, peer influences, microsystem celebrations and community organisations), and then psychosocial factors at an individual level (changes in behaviour and consumption). The findings, in line with Bronfenbrenner's framework (Bronfenbrenner & Morris, 2006) are diagrammatically represented in Figure 10 below.

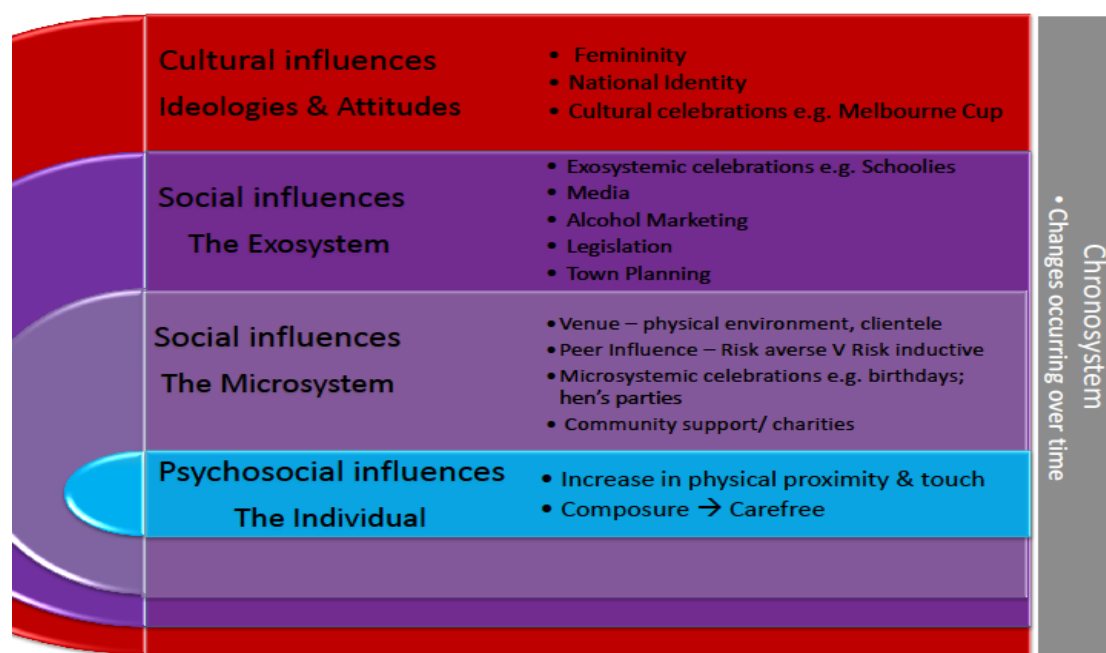


Figure 10. Factors influencing women's alcohol consumption and alcohol-related behaviours related to public drinking venues.

Some key overarching themes emerged from the findings. Alcohol consumption occurred for the majority of women observed in these contexts, but to varying degrees. A range of levels of intoxicated behaviours were observed. The absence of older women (more than 30 years old) in most drinking venues exemplified social norms that nightclubs late at night were the arena of younger women. When comparing behaviour across contexts, “Schoolies” (predominantly younger drinkers, aged 17 to 20 years old), through to nightclubbing (approx 18 to 30 years old) to Melbourne Cup Day (18 to 50 years old) there was evidence that a certain amount of maturation occurs around alcohol consumption. That is, for the most part younger women at schoolies and nightclubs showed more overt signs of intoxication and associated behavioural changes than the few older women observed. Appendix F shows observation summaries incorporating varying components that appeared to influence women's behaviour.

6.4.1 Cultural Factors

Evidence of cultural factors influencing women's alcohol consumption and associated behaviours emerged in the observations in terms of the observed distinct gender roles and potential sex-role norms (e.g., representations of glamour, sensuality, party-girl) around what it is to be a woman in Australia. That is, women were dressed in attire that was specific to going out drinking, with appearances and behaviours that were appropriate to their gender and the drinking context. Much evidence supported this finding including the following observations that were recorded: "Most women have long or shoulder length hair."; "Lots of women drinking cocktails – Some women carrying/ with two cocktails each." [Observation 1]; "One woman doing make up." [Observation 4]; "Some women appearing self-conscious as they tug at their dresses (lots of bandage dresses). Woman adjusts and flicks her hair." "Woman adjusts her straps." "One woman approached by man, when I was in the toilet. He asked if she was alone and adds.... 'Hate to see a pretty young girl on her own without anyone to look after her.' Asked if she had a husband or friend looking after her." "A young woman with long black hair (bandage dress?) climbed up on the wet t-shirt podium that we were sitting on and started dancing. She subsequently twisted her ankle and knocked over a bottle on the way up, but got there and started dancing 'seductively', flicking her hair across her eyes and gyrating hips. Some men watched with some eye contact happening. Two women looked and talked and laughed." [Observation 5]. Further evidence of this finding was noted during document analysis of media and marketing representations of these roles (see Appendix G – Young professional women; Appendix H – Students & backpackers), and was further exemplified while observing differences between men and women's behaviour in the venues.

Cultural beliefs and societal values (Bronfenbrenner & Morris, 2006) appeared to filter through as Australian national identity within cultural events such as the National Rugby League (NRL) grand final and The Melbourne Cup. The media emphasised the

national and cultural importance of such events. For instance, the Melbourne Cup observation highlighted “the day a nation stands still”, as a noteworthy event in Australian culture with traditions, history and normative behaviours associated with it.

In line with Bronfenbrenner’s (2006) framework, multidirectional relationships were demonstrated as cultural attitudes manifested in factors at social and psychosocial levels. In turn, such factors are most likely influencing changes in cultural attitudes (Ayers et al., 2012; Chapman & Werner-Wilson, 2008; Fekete et al., 2001; Ives, Obenchain, & Oikonomidou, 2010; M. E. Jones, Cason, & Bond, 2004; Kenneavy, 2008). The representation of such relationships is evident when the media takes a stance on events and celebrations influencing cultural acceptability, public policy and intervention. Melbourne Cup Day is portrayed as a “culturally acceptable event” advocating notions of an Australian national identity. In comparison, “Schoolies” is portrayed as a “cultural concern” tolerated through increased intervention at a social level, which, in turn, aims to mitigate harm and negative attention (e.g., State Government Websites promote harm minimisation at “Schoolies”). For instance, The Sydney Morning Herald features the Melbourne Cup in its Lifestyle section promoting fashions suitable for the day with “Melbourne Cup frock fest”(Schluter, 2010) and follows up with an article describing how a solicitor from a high socioeconomic suburb in Melbourne won \$90 000 for gaining first place in the Melbourne Cup fashion show (Hush, 2010). This report is in direct contrast to a newspaper reporting on Gold Coast schoolies stating, *“The perception that there was going to be what was described as a perfect storm with 50, 000 kids from Queensland, NSW and Victoria all arriving at the same time”*, and then goes onto state,

But they were pleased only 16 schoolies were arrested overnight on 20 offences. The majority were for being drunk and public nuisance offences, while three were arrested for minor drug offences allegedly relating to cannabis. In addition, 107 schoolies were issued with infringements for

drinking in public. Of the schoolies arrested overnight there were 14 males and 2 females, police said (Calligeros, 2010).

These two contrasting articles highlight how two cultural drinking events are portrayed to the Australian public in very differing ways and may assist in influencing attitudes toward the events and activities that take place within them. It is evident that images and cultural representations within the media influence people's attitudes and behaviours (Cusack & Digance, 2009; Hellman & Einstein, 2015)

6.4.2 Exosystem Factors

Factors at the exosystem level such as media, marketing, government policy and exosystem events were observed in the arenas in which women consumed alcohol. For instance, billboards, online advertising and newspaper articles displayed, and therefore informed consumers of what is expected (e.g., dress code, normative behaviours, normative age) if one is participating in these contexts. These factors appeared to influence women's venue choice and their behaviour occurring within the venue. For instance, social media sites and advertising presented the following examples, which were highlighted through the document analysis: "Today's OBSERVATION 2 VENUE [sic] is a lot different to the working man's digs of many years ago. It's now a modern and sophisticated dining and entertainment venue, featuring our themed bars and function rooms, with excellent food, wine and cold beer on offer" and so this venue was less formal than Observation venue 1 and the people's dress code was consistent with this message wherein "Calm & collected crowd"; 1 group (large) of women: nicely dressed up, standing - Most patrons seated" and "Casual dress = men, most common T-shirts & jeans" [Observation 2]. Further, the patrons' dress codes were similar to what was advertised. For example, more formal clothing at Observation 1 which targeted young professional women and more casual but sexualised clothing for Observation 6 which targeted backpackers and student. Evidence of legislation and licensing

laws was apparent with security checks upon entry to drinking establishments. Government policies and laws had an indirect effect with licencing laws dictating closing times in establishments and thus when women left them. Further, Australian federal laws regarding legal age of drinking were seen to be enforced with identity checks at venue doors. Alcohol advertisements were prolific at all venues except Schoolies. Where present, advertisements appeared to be an implicit part of the environment promoting the idea that alcohol is an inherent and important part of these events. A noticeable difference between alcohol and tobacco advertising was observed at the Melbourne Cup Day event where alcohol advertising was ubiquitous, but the tobacco stall was black featureless and without any advertising¹⁰. This observation then infers the importance of legislation at an exosystem level.

Additional exosystem factors highlight town planning that facilitates the creation of nightlife areas that are a precinct of clubs, bars, ATMs and restaurants and enable accessibility and consumption of alcohol and food. Existing literature (e.g., regarding night-time economies) underline the importance of local policy in creating such night club districts and how these areas impact young people's substance use (Hobbs et al., 2000; Measham & Brain, 2005).

¹⁰ Queensland's tobacco laws (*Tobacco and Other Smoking Products Amendment Bill 2004*) came into effect in December 2005 and restricted how tobacco products can be displayed at retail outlets and banned tobacco advertising. For instance, display restrictions included:

- Only one smoking product display per retail outlet is allowed and mandatory signs must be displayed;
- Smoking product displays can be no more than one square metre;
- Additional smoking products must be totally covered;
- Cigarette carton displays are prohibited;
- Unbranded advertising of smoking products (e.g. 'Cigarettes sold here') is prohibited; and
- A quit-smoking sign must be displayed at the main point of sale.

Media appeared to impact cultural norms and language use. For example, news reports coin terms like “toolies”¹¹ and shared language occurs between patrons on social network sites and venue marketing (e.g., use of alcohol -related terms like “massive night”). Online social networking sites facilitate interrelationships between venues, individuals and their peer groups. Venues use these websites to promote themed nights that can incorporate cultural and exosystem celebrations (e.g., Oktoberfest, Melbourne Cup Day) and then gain instant feedback from patrons’ comments evaluating the night’s success. Women can visit a venue’s social network page, upload photos and comment on the “massive night” they had there and distribute it among peers. The growing importance of online social networking sites as a form of advertising within the alcohol industry was recognised last year by The Alcohol Beverages Advertising Committee (The ABAC Scheme, 2011).

Australian cultural identity (Cusack & Digance, 2009), was represented in the media, and marketed to varying degrees to both men and women in drinking establishments. For instance, Melbourne Cup media targeted both men and women, appealing to respective gender roles with general articles having an overrepresentation of male sports commentators, male jockeys, male trainers and male horse owners with women appearing in the article with a commentary on the fashion of the day (Franklin, 2010). In contrast, as previously discussed, women featured substantially in Melbourne Cup related media through representations of fashion (Schluter, 2010; "Too hot to trot - Melbourne Cup race wear 2010," 2010). Within the racecourse marketing was observed that further evidenced this appeal to both men and women. That is, targeting men there were women in “sexualised” outfits that advertised

¹¹ Popular Schoolies (or leavers) venues are often attended by people well past school age, labelled by the media as *toolies*. The word is derived from the notation "too old for Schoolies" and also the slang expression "tool" meaning idiot. Toolies are a major topic of media scrutiny during Schoolies week. (Park, 2011)

nightclubs and alcohol observed: “Photo thing = people taking photos of man with Bundy girls and photos of man with Electric Playground girls (Lycra pants)” [Observation 4] and targeting women the following was observed: “Fashion Marquee has fashion parade – predominantly women; Also a ‘women’s area’ has a popular make up/ beauty/ perfume shop stall offering women – to be made up.” [Observation 4].

Such gendered media targeting compared with that of the NRL grand final which was aimed more toward the Australian male. This gender targeting was exemplified by a venue’s physical environment (e.g., male sports on all TVs, female staff wearing low cut cowgirl tops, flyers for masculine entertainment) as it promoted NRL celebration.

6.4.3 Microsystem Factors

The most notable influencing factors at the microsystem level were the drinking venues themselves and peer groups. Microsystem celebrations (e.g., 18th Birthday, hen’s parties) and to a lesser extent, the role of community organisations also influenced women’s drinking. Non-government organisations, such as Drug Arm, were present at schoolies with psycho-educational material and harm minimisation procedures (e.g., distributing water).

A drinking venue’s image, marketing promotions, physical environment and security appeared to influence patronage and behaviour. Mood lighting, the physical space, accessibility of alcohol (e.g., five bars in one nightclub) and the music all created an atmosphere that seemed to influence the mood within the venue’s space and these factors changed over the course of the evening to create different moods and influenced changes in behaviour. For instance, marketing promotions sometimes targeted women in particular: “DJ advertises free cocktails at midnight for women.”[Observation 6]; and “Some women carrying / with 2 cocktails each – “stocking up” (to get in before happy hour stops)” [Observation 1]. The physical environment, such as one club that had five different bars on the one floor, allowed easy access to alcohol. Security guards checked that people were of legal drinking age and were present to monitor behaviour. This presence was particularly

evident on the night of the NRL grand finals: “1 security showing new security male around. – Expectation of big night” [Observation 2]; “Security: multiplying: obvious presence (plastic glass): well organised & professional have given it a lot thought.” [Observation 2] and finally, “As we’re leaving, a group of security guards debriefing.” [Observation 2].

Importantly, each venue promoted a particular image, event or entertainment that targeted certain ‘types’ of people and tended to cater for one gender more than the other, often men. Under the guise of “ladies night”, for instance, venue management pursue female clientele by offering them free admission and free/ cheap alcohol and in turn, attracted male clientele interested in meeting women. It is interesting to note that although research indicates the feminisation of venues, that in some venues this feminisation appears to have taken a form that still caters for men. That is, although women are represented more in the public drinking spheres compared to previous generations (Graham, Wells, Bernards, & Dennison, 2010; Kirkby, 1997) and it “is a lot different to the working man’s digs of many years ago [Observation 2]”, there seems to still be a subtle, and sometimes not so subtle, targeting of male customers. Importantly, the role of increased alcohol consumption and social facilitation links with business economics at an exosystem level.

One of the most noticeable factors that influenced mood and behaviour was music. There was a synchronicity between the change of music (e.g., tempo & lyrics) as the event/ evening progressed and people became more intoxicated and thus resulted in a change of group behaviours and mood. The music changes appeared to be planned with one example observed [Observation 1] wherein the disc jockey appeared to change the music too soon and did not get people on the dance floor, so returned to the slower background music that he was playing for about another thirty minutes. The second time he changed it to a faster beat popular song, people flocked to the dance floor. With a change in musical tempo, volume and lighting, often people would merge onto a dance floor. People congested on a dance floor facilitated a new freedom to interact with strangers and ignite interaction. Dancing at drinking

establishments has been seen as part of a courting ritual (Downey, 1994; Grazian, 2007; Hendrie, Mannion, & Godfrey, 2009; Muñoz-Laboy, Weinstein, & Parker, 2007). Similarly, participants observed in Study 1, appeared to be aware of the potential meeting of a partner or mate for the night and attempt to display signals indicating interest or rejection. Displays of shared fun contribute to the elevated mood observed in many patrons and are in conjunction with heightened states of intoxication.

Venues have been shown in the research literature to have an impact on alcohol consumption and the associated risk behaviours (Chatterton & Hollands, 2002; Hughes et al., 2011). Hughes and colleagues (2011) argue that environmental factors (e.g., staffing; music, crowding, cheap alcohol accessible) in drinking venues increase alcohol consumption and alcohol-related harms, and thus interventions at this level are paramount to reducing such risk and harms. Security levels send messages of standards of behaviour and is sometimes taken into account when young women choose a venue (Armstrong et al., 2010b).

6.4.3.1 Peer Influence – Risk Aversion or Risk Induction

Much evidence around peer influence came from observing interactions and overhearing conversations with peer groups (e.g., work colleagues or friends). Peers appeared to influence women's attitudes and behaviours about themselves and their relationship with alcohol. The observational data suggested peers offered one of two roles: a supportive risk-averse role; or a risk-inductive role. Risk-averse roles were observed when peers stopped their evening of fun to: sit with someone who had become unwell/ throwing up (likely substance-induced); comfort a crying companion; support someone apparently having bad reactions to substances; or offer water. The contrasting, risk-inductive role also witnessed was when peers tried to influence individuals to continue 'partying' when the individuals may have needed risk intervention. Examples of conversations overheard included, a woman slurring to her friend, "I'm going home", but the friend pleaded with her to stay out; or when a woman finished throwing up in the hotel's toilet and her friend's response was, "She'll be

okay. It's drunkenness. We can handle it. Top night!" At "schoolies", evidence of the importance of this celebration as a rite of passage and the peer reinforcement of norms was observed when a young man told a young woman that he had decided not to drink on the last night of celebrations. She responded with, "It's the last night. You drink, drink, drink. You have to drink. You won't have a night like this again". Peer reactions signal to an individual what is acceptable and desired from a night out with friends.

Peers also appear to be a point of reference with regard to appearance, dress codes and relationship behaviours (social facilitation). The nightclub toilet seems to be a place to reassess the night's proceedings, the feasibility of potential relations with the opposite sex and general appearance. Toilet talk ("So you're not going to talk to that c*** are you?" and "Why is everyone so fricking skinny?") appeared to be an important aspect that occurs in a female only space in order to assess women's behaviour and appearance when out drinking. The toilet in a public drinking venue was a space where women could get away from the 'intoxicating mood' in the club, assess their levels of inebriation and consequent behaviours; and thus, may be an important physical area of intervention. Similar interventions have occurred in Australian casinos to mitigate gambling addiction harms (Australasian Casino Association, 2009).

6.4.4 Psychosocial Factors

6.4.4.1 *Control to Disinhibition*

Research indicates that alcohol can play an important role in reducing inhibitions, and that such disinhibition may be a result of the anticipated effects (alcohol expectancies) and the pharmacological properties of alcohol (Freeman, Friedman, Bartholow, & Wulfert, 2010; Maticka-Tyndale et al., 2003; G. Smith, Toadvine, & Kennedy, 2009). Such research describes alcohol being used to increase social disinhibitions, referred to by Freeman and colleagues (2010) as diminished concern with self-presentation. The findings from the observational study showed evidence of women's behaviour often changing during the course

of the event in a manner akin to enhanced social disinhibitions. A transition occurred from appearing composed and in control of their appearance and behaviours; to a relaxing of their poise and behaviours. This observation related primarily to composure around the women's appearance and to changes in interpersonal communication wherein women increased their physical proximity and touching with others.

The transition from composed to carefree was seen in all of the observations, but possibly most exemplified at the Melbourne Cup observation. In the days preceding the Melbourne Cup, newspapers and magazines overtly informed women about what to wear via the latest fashion tip and how to behave via Melbourne Cup etiquette (2010; "Raceday Etiquette," 2010; Walker, 2009). Etiquette rules included keeping uncomfortable shoes on and not becoming intoxicated to the point of throwing up. At the Melbourne Cup event, the researchers observed that there was almost a polarisation of adherence to these rules as the day progressed and levels of intoxication increased. That is, some women maintained control and continued to act in a way befitting the rules of femininity, maintaining composed, whilst others 'relaxed' their composure throughout the day as disinhibitions appear to override the awareness of one's appearance to become carefree (e.g., walking without shoes, sitting on grass).

The relaxing of social norms pertaining to interpersonal communication such as decreasing personal space (E. T. Hall, 1966; Robson, Kimes, Becker, & Evans, 2011) and increased touching was observed and may have been representative of alcohol's role as a social facilitator (Eldridge & Roberts, 2008; Sheehan & Ridge, 2001; Wells, Kelly, Golub, Grov, & Parsons, 2010). Social facilitation, as discussed below, therefore, appears to be an important influence at this level.

6.4.4.2 Women as Accessible

Across the observations women and men behaved quite differently. 'Situational norms in a clubbing environment permitted social facilitation; potential intimate encounters and

often men approaching women they did not know to engage in conversation. These approaches can be met with different attitudes and reactions from the women being approached and thus the success of the social interaction being taken a step further varies (Armstrong et al., 2010b). Sometimes, (e.g., when a man sat at the same table as the two researchers doing the observations and started talking to them), men seemed to ignore the verbal and non-verbal communication that signalled disinterest and persisted in trying to talk. This finding is consistent with the literature (Snow, Robinson, & McCall, 1991) that demonstrates intoxication can interfere with men reading and accepting “cooling out” (p. 424) messages.

It was interesting to note that it was not typical for women to approach men and highlights the potential sex role norms for courting in Australian culture. Grazian (2007) discusses that in nightclub contexts (in the USA) the way in which men pursue women is an enactment of masculinity. Furthermore, some men were persistent and overt in their search for a mate for the night. The candidate and research assistant were verbally abused because they only said hello to a stranger they passed by on the street when he started talking to them. Hence, observational data indicated an assumption that women should be accessible and available to meet and interact with men approaching them. This suggestion is supported in the available literature (Snow et al., 1991) and sometimes leads to a sense of obligation to be polite, which could confuse messages and intentions further. Research shows that men often operate on the assumption that women are at a club to meet sexual partners and because they have been drinking they are promiscuous and sexually available (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001; Snow et al., 1991).

6.4.4.3 Women as Consumable

Many female staff in the nightclub and alcohol industry were observed to be dressed in a way which fitted with sex-role norms of women dressing in a sexualised manner and appeared to be aimed at attracting male customers. For instance, female staff dressed in tight

fitting and low cut tops and women advertising nightclubs stood outside the clubs or walked around the racecourse on Melbourne Cup day dressed in tight fitting lycra or “erotic” costumes. Consistent with the pursuits of pleasure (F. Hutton, 2004; Measham, 2004b) and the sexualisation of nightclubs, part of the clubbing culture relies on staff (particularly female staff) being attractive and promoting the erotic image of the club (Grazian, 2007). To this end, women are part of the consumable product that is the night time economy (see Section 2.3.2) and helps to mould the image of a particular club.

6.4.5 Behaviour as a Function of Time and State of Intoxication

It was evident that during the course of each observation the nightclubs’ and pubs’ physical settings (music, entertainment, lighting and security), promotional offers (e.g., happy hour) and patronage changed. As time progressed, there was evidence of an increasing presence of intoxicated participants taking the form of: exaggerated gestures and movements; increase in volume from loud talking and amount of laughter; closer proximity between people; more touching; increased occurrences of strangers talking and yelling out to each other and more dancing. Toward the end of each observation, evidence of “messy drunks” (Armstrong et al., 2010b) occurred with women: crying; struggling to walk unassisted; sitting on footpaths looking unwell; behaving aggressively; and being unaware of their appearance to the point of sometimes exposing underwear.

6.4.6 Drinking Differences as a Function of Age

Pertaining to research question four, it is evident that women’s drinking behaviours change, in that older women did not drink in the public sphere to the extent that younger women are. The differing normative patterns of women’s drinking as a function of age aligns with literature discussing older women’s consumption occurring primarily in the private sphere (DeMarinis, Scheffel-Birath, & Hansagi, 2009; Epstein et al., 2007). This ‘private consumption’ presents its own set of associated risks with older women having drinking

rituals that occur in the privacy of their homes and is a barrier to detection of problematic drinking (DeMarinis et al., 2009; Epstein et al., 2007).

Both implicit and explicit normative influences may have partly resulted in older women's absence in such drinking venues. Implicit normative influences were evident as the candidate felt discomfort due to her age as she carried out the observations and a venue changed from mixed ages to younger clientele as an evening progressed. Similar sentiments were expressed by older women (Armstrong et al., 2010a) where not fitting in at nightclubs due to age differences became a reason to change where and how they drank. More explicit messages occurred at schoolies where the candidate and research assistant did not fit the normative age group. As the night progressed comments by three different groups were directed at the researchers including being labelled as "toolies" and being told disdainfully, "You must be at least 75!"

A further contrast between the younger 'schoolies' event and the Melbourne Cup event where a wider range of ages were acceptable was in the role of community organisations. As discussed, at schoolies, this role took on a harm minimisation function. However, at the Melbourne Cup event, charities were present in order to *receive* help by requesting financial donations as people exited the event, and thus possibly taking advantage of intoxicated people with reduced inhibitions. Furthermore, whilst excessive alcohol consumption occurred at both events, the assumption here appears to be that one group of people cannot cope with excessive alcohol consumption and another can. Considering the age differences, this disparity raises the question of whether the latter have learnt to do so.

6.4.6.1 Reasons to Party – Cultural Celebrations, Venue promotions & Microsystem celebrations

It was apparent that often reasons to party and therefore reasons to consume alcohol occurred on a weekly basis and was supported by all systems of influence. That is, in the absence of cultural events (like Christmas, Melbourne Cup etc), venues often marketed

special themed nights and also, microsystem celebrations (e.g., birthdays, hen's parties etc) were held in nightclubs. All of which appeared to have traditions, symbols and potentially prescribed behaviours attached which involved alcohol consumption. Alcohol consumption was a normative behaviour of all celebrations observed. Venue promotions (e.g., themed nights, happy hour) targeted patrons of a particular gender or class. So, wine tasting evenings may attract middle class women whilst Sinful Saturdays cater for students and backpackers.

6.4.7 Summary

Overall, this study based on an observational study and including document analysis revealed that influences and complex relationships between cultural, social and psychosocial systems help shape women's alcohol consumption and associated behaviours in public alcohol-related contexts. These multiple layered influences are consistent with the BMHD (Bronfenbrenner & Morris, 2006). There is evidence that messages pertaining to women, their role in society and alcohol are carried from cultural systems through to exosystems, to microsystems, and then to influence psychosocial factors occurring within the individual woman and her behaviours around alcohol consumption. These systems interrelate and constructs within them are multidirectional, as clearly exemplified by the interaction of nightclubs, social networking pages, venue marketing and consumer demand. Of primary importance, was the absence of older women in such public contexts, so many of the conclusions from Study 1 pertain predominantly to younger women (approx. 18 to 30 years). Without drawing on literature, the observational method is somewhat inadequate at assessing the role of the chronosystem. However, the findings of the study show the importance of time, but on a smaller scale than the chronosystem (i.e., during the course of a drinking episode) that Bronfenbrenner and Morris (2006) discuss.

The factors highlighted how women's alcohol-related behaviours are influenced by their immediate environments and people within them. That is, women's behaviours regarding alcohol were informed through a portrayal of alcohol-related norms and values

demanding adherence to socially prescribed ways of appearing and behaving in alcohol-related contexts. Peers influenced and reinforced such alcohol-related norms and values and played either a risk-averse or risk-inductive role. Women were influenced by normative behaviours which often seemed to endorse alcohol consumption to a certain level, until social disinhibition occurred, wherein a new set of acceptable behaviours were permitted. Hence, in such contexts, social facilitation was enhanced by this transition from being “composed to carefree”.

The current findings and literature regarding nightclub culture suggest that women's roles and identity within a clubbing context facilitates beliefs about women as accessible and consumable. The situational norms in the clubbing arena also resulted in the occurrence of ambiguous forms of communication that allowed the expression of female sexuality, but also increased alcohol-related risks. Finally, factors encouraging women to increase alcohol consumption were observed which promoted the idea of a “massive” night that helped to decrease inhibitions, but also increased risk.

Study 1's findings addressed research questions one through to four, but was limited by its inability to assess intra-individual influences. It was also unable to assess three structures described in Bronfenbrenner's model (Bronfenbrenner & Morris, 2006): family; spousal; and work influences. Similarly, assessment of influences on older women's drinking was also limited by the diminished representation of this cohort in the public drinking arena, but, as discussed, represents a finding of the study in that older women's absence in the public drinking arena demonstrates that their drinking behaviours differ from younger women's in this regard. These factors will be explored further in the interviews of Study 2. Further limitations of Study 1 include the difficulty in assessing: levels of intoxication, attitudes behind the behaviours observed, substances used and how they interacted with behaviour. Assumptions regarding levels of intoxication were made that drew upon observations of people's movements, behaviour and speech. As a registered psychologist

with knowledge and experience in the area of drug and alcohol, there may have been a potentially improved degree of accuracy with which assessments of intoxication were made. Finally, whilst the candidate attempted to be aware of possible biases and note as much descriptive information as possible during each observation, it is important to note that some selective attention was given to observations in order to address the research aims. Nevertheless, examples of the attitudes and behaviours noted in the observations from which inferences were drawn were noteworthy and/ or prevalent across venues.

Some of these limitations are addressed in the subsequent studies. The observational method was suitable to assess research questions one through to five, and examined cultural, social and psychosocial influences on women's drinking, by observing them in their natural setting. However, these questions are re-examined in Study 2, a qualitative study involving individual interviews with women, to triangulate findings and gain a greater depth of understanding. For instance, constructs difficult to assess (such as the influence of one's work, family influences, and attitudes toward alcohol and drinking) in Study 1 were examined in the interviews (Study 2) and were used to inform the development of the survey (Study 3). The salient constructs that emerged in Study 1 which were used to inform Study 2 and Study 3's materials and concepts are outlined in Table 8 below.

Table 8

Study 1 Constructs Informing the Focus within Study 2

| Themes and Constructs that Inform the Independent Variables in Study 2 | |
|--|---|
| Cultural Influences | Cultural attitudes around women and alcohol; Cultural celebrations; Gender roles |
| Exosystem Influences | Media; marketing; infrastructure |
| Microsystem Influences | Peer influence; Microsystem celebrations Drinking contexts/venues; Selection of drinking context |
| Psychosocial Influences | Social Facilitation; Women as accessible; Women as consumable |

| Themes and Constructs that Inform the Dependent Variables in Study 2 | |
|--|--|
| Behaviour as a function of time and state of intoxication | |
| Alcohol consumption and alcohol-related behaviours | |

Regardless of its limitations, Study 1, with its ethnographic approach, provided rich descriptions of numerous influences on women's drinking in the public sphere across a range of contexts. By observing women drinking in public venues and complimenting the findings via a document analysis, the study was able to provide a valuable insight into the way women engage in a range of drinking behaviours in public drinking venues. The current study demonstrates how influences on women's drinking emanate from a range of levels of varying proximity to the individual, from the broadest cultural level through to factors at the individual level. These multiple level factors also appear to be interrelated across levels and factors, and highlight the complexity of women's drinking behaviour and the influences upon such behaviour. As a result, it would seem prudent to acknowledge this complexity and address multiple levels of influence when targeting interventions.

Recognising the complex challenge faced by researchers and practitioners of public health promotion in their efforts to reduce alcohol related harms, the current findings provide important insight into some potentially beneficial directions for future interventions. Specifically, the current study provides insight into factors at multiple levels of influence which may help to inform the focus of future interventions such as the content of public education, advertising initiatives, and public policy. The role of cultural messages, alcohol related media and marketing, venue and peer influence may all affect upon women's drinking behaviours and, thus, may represent potential points for future intervention. For instance, restrictions (compared with current alcohol industry self-regulation) on alcohol advertising may be just one of many foci of intervention. In conjunction, public education could target the cultural messages that women are receiving (and differentially those that men are receiving (Conroy & de Visser, 2013b)) that promote their alcohol consumption as enactments of femininity. Overall, the findings of the current study suggest that in order to maximize the effectiveness of future interventions it may be wise to recognise and address factors across the many different levels of influence.

Chapter 7 Phase 1: Study 2 – Interviews with women aged 18 to 55 years old

Previous chapters described the rationale underlying this current programme of research and the need to examine the different systems of influences on women's alcohol consumption using a mixed methods design. Chapter 6 presented the first study (Study 1 – Observations and document analysis) in the inductive phase. This chapter presents Study 2 of the programme of research, which examined the influences on women's drinking as reported by 35 women interviewed by the research candidate. It should be noted a manuscript based on this chapter has been submitted for publication in a peer reviewed journal.

7.1 Methods

7.1.1 Participants

Ethical approval was obtained from the host university's Human Research Ethics Committee. Semi-structured telephone interviews, of 45 – 70 minutes, were conducted with 35 women (18-55 years) residing in Australia. A media release was launched to promote the research (e.g., nationwide radio and newspaper interviews) and once the participants contacted the researcher (i.e., the research candidate) they were sent a participant information sheet. Informed consent was gained once participants affirmed that they had read and understood the information sheet. Purposive sampling enabled insight into the alcohol-related attitudes and behaviours of different age groups of women with a range of alcohol use behaviours (i.e., abstinence through to alcohol dependence). Both younger women and older women have elevated risks of alcohol-related harm for different reasons. That is, younger women are more likely to engage in binge drinking (acute harm), and older women are more likely to be exposed to greater weekly intakes (chronic harm) (AIHW, 2011a; Makela et al., 2006). The interview data were categorized according to age groups that allowed comparisons between cohorts most at risk (18-24; and 35-55) and least at risk (25-34) (ABS, 2009b, 2012a; AIWH, 2008) in Australia.

7.1.2 Materials and Procedure

The research candidate conducted all interviews and asked open-ended questions to facilitate conversation around the women's alcohol consumption, and to allow the women to describe their experiences with depth and detail (Gibson, 1998). Such questioning also allowed the participants to share their perspectives without the interviewer leading the answers (e.g., "Thinking about times when you drink alcohol. In your own words, please tell me about those times").

Sociodemographic information including occupation, marital status, and number of children was collected at the end of the interview to gain an insight into the women involved in the study. The Alcohol Use Disorders Identification Test (AUDIT) (Babor et al., 2001; Saunders et al., 1993) was also administered at the end of each interview to collect and quantify data on the women's alcohol use. The sociodemographic survey and AUDIT were purposely placed at the end of the interview so as to not break rapport with the women at the start of the interviews. At the end of each interview, participants were offered a shopping voucher to thank them for their time and their participation. An alcohol information sheet which summarised the Australian Guidelines to Reduce Health Risks from Drinking Alcohol (NHMRC, 2009) and which provided the contact details for various support agencies was also sent.

The use of telephone interviews increased access to participants from various geographical areas and permitted greater anonymity and convenience for the women interviewed. Recruiting women from different geographical areas, including both urban and regional areas, increased the heterogeneity of the sample. Increasing the heterogeneity of a sample in such a way provides evidence that findings are not confined to one particular place (Robinson, 2014) and, thus, helps to explore a phenomenon across contexts (Mason, 2006).

The interviewer's experience in counselling and active listening communication teaching meant that she conducted the interviews with empathy, non-judgement and facilitated open and honest communication. The use of such techniques are described as helping to facilitate conversation and provide a supportive environment in interviewing (Kvale, 1996; Morse & Field, 1995). Member

checking throughout the interviews occurred by: asking for further information when appropriate; clarifying complex interview discussions; and reflecting and summarizing the main points back to the woman being interviewed. The procedures undertaken to enhance quality and trustworthiness (Lincoln & Guba, 1985) are outlined in Appendix I.

7.1.3 Analysis

As discussed previously, although an inductive approach is often defined as having no a priori knowledge (Merriam, 2002), there is also the perspective that having no a priori knowledge is not only impossible or unrealistic but unhelpful (Morse, 1994; Nastasi & Schensul, 2005). Further, it would be difficult for research to be truly defined as purely inductive considering a researcher's need to know which gaps in knowledge need to be addressed. Therefore, the current study conceptualised inductive in terms guided by Nastasi and Schensul's (2005, p. 183) "role of theory and knowledge" whereby the main aim was to foremost understand women's drinking from their perspective. Although data collection was guided by Bronfenbrenner's (2006) model, key themes were allowed to emerge through a thorough, in-depth exploration not presuming nor excluding any potential factors and maintaining an openness to adapt or discard the model if necessary.

The telephone interviews were audiotaped and subsequently transcribed, by a professional transcriber, verbatim. After removing potential identifiers and replacing names with pseudonyms, the data were analyzed by coding it into units of meaning within each interview and then across interviews. That is, rather than code the transcripts word by word, they were coded as one element or segment that had a meaning before continuing to the subsequent meaning in the text. Although the BMHD informed the interview questions and functioned as a reminder to be cognizant of influences emerging across multiple systems of influence, a thorough, in-depth exploration not presuming nor excluding any potential factors allowed key themes to emerge. Peer reviewing occurred after each level of coding was completed, as well as times when the women's meanings were ambiguous. A full thematic analysis, as outlined in Braun and Clarke (2006), was conducted to identify key themes, cross-referencing between transcripts and recordings throughout the coding process to clarify

meanings (e.g., to check for emphasis or tone in a conversation). Comparing units of meaning within interviews, across interviews, and across age groups was consistent with the constant comparative method (Boeije, 2002; Glaser & Strauss, 1967) and facilitated refinement of the categories into higher level themes. Regular peer reviewing (with three other research team members who were familiar with the research objectives but were not present during data collection) occurred throughout the interviewing process and subsequent analysis. It is believed that saturation occurred after an “emergence of regularities” (Lincoln & Guba, 1985, p. 265) was evident. Peer agreement during analysis was usually easily reached after discussion and ongoing referral to the transcripts.

7.2 Findings and Discussion

7.2.1 Participants

The 35 participants represented women from three age brackets, 18-24 years old ($n = 11$), 25-34 years old ($n = 12$), and 35- 55 years old ($n = 12$). A range of alcohol use behaviours was apparent with 16 women’s AUDIT results showing non-hazardous drinking; 12 scored in the hazardous or harmful range, and 7 indicated alcohol dependence. Interviewing women with such a range of reported drinking behaviours, including women who reported high levels of alcohol consumption, meant that valuable insights were gained from the full spectrum of women with at-risk drinking behaviours as well as those who reportedly drink at low risk levels. It should be noted that as seven of the thirty-five participants’ AUDIT scores indicated dependence, that the findings may be skewed toward themes or factors that influence such a cohort. However, overall a good range of alcohol use behaviours was evident.

7.2.2 Overview

Interviewing women about their alcohol-related attitudes and behaviours revealed evidence of alcohol consumption being embedded in many facets of Australian life. Specifically, women underlined how cultural, social, and psychosocial factors influenced them in terms of their drinking behaviours. As discussed above, throughout the interviews and analysis, the researcher remained open to any and all themes that emerged from the data and remained open to amending or discarding

Bronfenbrenner's framework (2006). However, evidence was clear that Bronfenbrenner's framework had utility in which to understand the layers of influences that impacted women's drinking. Key themes, present in the interviews, are outlined in Table 9 below and are discussed further in subsequent sections of this article.

Table 9

Key Themes and Associated Levels and Systems of Influence Arising from the Interviews

| Level and System of Influence | | Key themes |
|-------------------------------|--------------|---|
| Cultural | | Gender roles |
| | | National identity |
| Social | Exosystem | Infrastructure (e.g., public transport; drinking establishments) Legislation |
| | Microsystem | Social Networks (e.g., Peers, Family, Partners, Work colleagues) |
| Individual | Psychosocial | Implicit social acceptance \leftrightarrow Awareness |
| | | Identity |
| | | Attitude |
| | | Intention |
| Chronosystem | | Mindfulness \leftrightarrow Habit |
| | | Changes in attitudes and behaviours across the life span |

7.2.3 Cultural

Cultural influences, in terms of Australian cultural values and identity were perceived by the women as endorsing of alcohol consumption in many contexts. The women interviewed, recognized cultural influences on their alcohol consumption as they discussed drinking as being embedded in "Australian culture" and that it is part of what it means to be Australian. The women who described drinking as "engrained" and "valued" in Australian culture highlighted how implicit drinking practices were. Some examples were: "It's just so engrained in our culture that you always take it for

granted that alcohol is involved in celebrations” (Alex35)¹² or “I think it’s quite culturally engrained.” (Bridget25) and “It’s . . . a fun way to celebrate I guess. It’s certainly definitely a part of Australian culture. ” (Tiffany30)

Frances35 portrayed the cultural acceptance of drinking with, “I think it’s very normal. . . It’s just the way you go out and have fun.” While Yvonne19 expressed concern about the prevalence of alcohol, “[alcohol] is symbolic of fun or this is what society is defining as this is what fun is”.

Fortuitously, in the sampling, some women had resided temporarily outside of Australia and provided rich insights into Australian versus other countries’ cultures. These women reported Australia as having a strong drinking culture. “Australia has a strong drinking culture” (Amanda35) compared to other countries (Ada21; Alex35; Frances35). The implicit nature of drinking in Australian culture was also demonstrated through the terminology used around drinking (such as “Cadbury”¹³, “drunk dial”¹⁴) with the assumption that the interviewer, being part of Australian culture, would understand such terms. Such use of culturally based terminology, assumes shared meanings and understandings and represent culturally prescribed ways of behaving (Geertz, 1973; Roche et al., 2008).

Culturally prescribed femininity and gender roles appeared to influence women’s drinking. The women’s accounts revealed attitudes that reflected acceptable ways for women to drink. The women

¹² To maintain confidentiality, but provide a sense of the accounts and experiences of the women interviewed, pseudonyms have been used with each quote or direct portrayal. The number at the end of the pseudonym is the woman’s real age.

¹³ “Cadbury” is a label given to a person who is easily affected by alcohol. It is based on the Cadbury ‘glass and a half’ of milk slogan, implying that it “only” takes the person a glass and a half to get drunk. (“Urban Dictionary,”)

¹⁴ Drunk dial refers to occasions when a person phones, SMS messages or uses social media whilst under the influence of alcohol.

referred to “lady-like” ways of drinking or judgments around how “her attitude to drinking is quite boy-ish.” They also described how they were given messages that outlined acceptable drinking behaviours that did not impinge on femininity and respectability. One woman recalled, “...mum saying to me because I’d bought a pint of cider once when I was 19 ‘oh it’s so unfeminine to have a pint!’” (Alex35) These findings are comparable to previous research which has highlighted the relationship between substance use and femininity (Lindsay, 2006; Lyons, 2009).

Changing roles within a woman’s life, such as a change in marital status or becoming a mother was reported to affect a woman’s alcohol consumption. Consumption could also be affected indirectly if a woman’s female peers had a role change. For instance, Tiffany30 described how her drinking venue was determined by whether or not her friends have children, so drinking at home is more likely if her friends have children. Another woman described how her drinking was impacted by her sister having a baby, “I spend a fair bit of time with my sister who has children so I’m not always drinking.” Mandy28. These findings highlight the importance of gender roles for both the individual woman as well as important others around her.

Gender role changes were highlighted further in discussions around differences between the women’s alcohol-related attitudes and behaviours compared with their mother’s. The women reported that changing roles and social norms for the previous generation was partly responsible for these differences. These findings are comparable to research highlighting the relationship between substance use and gender roles (Bergmark, 2004; Lyons & Willott, 2008; Virokannas, 2011).

7.2.4 Social

7.2.4.1 Exosystem

Narratives around infrastructure (e.g., transport options, proximity of drinking venues) and legislation emerged wherein a relationship between infrastructure and legislation was evident. The prohibitive effect of drink driving legislation influenced venue choice so that drinking without the need to drive was sought after (e.g., at home or a venue within walking distance or with available public transport). Reduced public transport options could affect their consumption by “forcing” them

to drink at home. In contrast, when venues were more accessible, drinking in public venues could occur. One woman described how her consumption has recently increased because . . . “We are now living quite close [to venues] . . . and it’s not having to, we used to have to get trains into the city.”(Tiffany30) A further example summed up the importance of infrastructure’s influence on her drinking with:

"Yeah I think also too to be quite honest my environment has really changed. If I still lived in the city I think I’d still be drinking more than because I live in the country. I really do because the cost of taxis and stuff is just so prohibitive. When I lived in the city you know it was much easier to get around you know so yeah. I think that, you know, it’s been a lot of environmental changes. . .”(Ivy54)

Drink driving legislation also tended to curb consumption when a woman was the designated driver. One woman (Eve23) discussed times when she was the designated driver, “If . . . they need a designated driver then I will usually offer to be that but that’s about the only time that I physically make the decision right even though I want to I’m not going to [drink].” Such findings are consistent with research showing an association between legislation and accessibility to alcohol, and indicate a potential source of intervention to reduce risk through public policy and legislation (Chatterton & Hollands, 2002; Room et al., 2005). If a woman was not the designated driver then the result was quite different, “I’ll have not have driven so I’ll be fine to keep drinking.” (Laura 27)

When asked about potential media and alcohol marketing influences, primarily, the women believed that television shows and books were more likely than alcohol advertising to affect their attitudes and alcohol consumption. However, one woman explained that the advertisements did not make her want to go out and buy it immediately but “if I see an ad for something that I think might taste good I’ll think about that the next time I go to buy some [alcohol]”(Eve23). Also, Katie21 responded, “This is going to make me sound like I’m obsessed with Pina Coladas but.... “Yeah it’s like if it’s a picture of that or something I’ll be like oh yeah they’re really yum. So I think that’s really as far as it goes”. Whilst, there is some debate on the effects of alcohol advertising (Cui, 2000;

Ringold, 1995), there is some evidence to suggest gendered effects of advertising (Jernigan et al., 2004), which may be influencing the way in which women are drinking. The interesting contrast between the effects of alcohol advertising (Gallego-Moya et al., 2014; Karakos, 2014) with the women's denial of such influence suggests the implicit nature of such mechanisms (Lau-Barraco, 2009; Pop & Iorga, 2012; Shin & Kim, 2011). For instance, the Third Person Effect (Davison, 1983) puts forward the argument that people tend to believe that marketing messages have a greater impact upon others compared with themselves, even though such messages can affect one's own behaviour (Shin & Kim, 2011).

7.2.4.2 *Microsystem*

Social networks in a woman's immediate environment (e.g., peers, partners, family, and work colleagues) were important in that they conveyed messages regarding acceptable drinking behaviours. The level of these factors was consistent with Bronfenbrenner's microsystem (Bronfenbrenner & Morris, 2006). Microsystem influences were readily described and seemed the most prevalent for the women and thus, were considered by the women as being important in that they directly affected alcohol-related attitudes and behaviours. There appeared to be little consistency as to which groups (i.e., peers compared with family or work colleagues) would encourage or discourage consumption. The women perceived some family members' messages as consistent with a need to decrease drinking whereas others felt the opposite influence from family members. For instance, one woman (Eve23) told how her father and sister label her as a "nana"¹⁵ because she does not match their higher levels of drinking. The influence of work colleagues was also discussed. Rochelle29 talked about how her drinking changes depending on where she is working, "When I worked in Melbourne there were some really social drinkers and I would certainly drink a lot more with them on a Friday night, go out and have a social drink. Whereas in the job I'm in now, no one

¹⁵ Nana refers to a grandmother figure and so, in this context, presumably one that is too conservative to drink alcohol. It appears to be an Australian colloquial term that is not recorded in any dictionaries.

actually goes out for a drink after work. I do get influenced by work colleagues but of course certain, if I'm with a partying sort of company, a company that I guess promotes that.” Similarly, Rose³⁴ highlighted work colleagues expectations when she stated, “Mainly colleagues would have said, ‘Oh you can have one can’t you?’ and in the later stages of pregnancy or breast feeding I’d say, ‘Yeah I can have one’ and I’ve had one.”

All of the women viewed expectations to drink in socially prescribed situations (e.g., partying, celebrations, weekends) coming from many groups in their microsystem. Sometimes the messages could be explicit as Toni¹⁸ reflected upon discussions with her peers, “If you say ‘I’m not drinking’, they’re like, ‘Oh! Why not? You have to drink!’ They’ll encourage you to drink.” “It just becomes a part of what they expect so everybody else joins in”. Even though such expectations seemed mostly readily accepted among the women, some felt pressured, rather than willing, to conform. They described how transgressions from prescribed drinking behaviours were often met with negative consequences. For instance, despite not liking alcohol one woman (Mandy²⁸) drank to avoid labels previously given by family that she was “uptight” for not drinking.

Mandy²⁸: I guess I don’t really enjoy drinking. I don’t think it really helps with anything.

Interviewer: If you don’t enjoy drinking, why do you drink??

Mandy²⁸: Just to fit in. Or maybe it’s an attempt to relax, an attempt to try and get out of my mind a little bit, but it doesn’t work.

Life events (e.g., job change, getting a partner) could lead to changes in social networks and their influence on drinking behaviours. Changing partners, peer groups or jobs were reported to alter drinking behaviours. These findings are consistent with literature regarding direct social influences on drinking behaviours (Conroy & de Visser, 2013b). Campaigns promoting awareness of the potential impact of such changes might underline possible preventative measures to risky drinking behaviours.

7.2.5 Individual - Psychosocial

Within the individual, Awareness, Identity and Attitudes seemed to influence the women's alcohol-related intentions and behaviours. Cultural and social acceptance of alcohol in the women's lives meant that they displayed various levels of awareness regarding influences and risks around alcohol consumption. In line with "the normalization of substance use" theory (Measham & Shiner, 2009), the women's accounts showed how alcohol consumption could be reaffirmed and unquestioned in many contexts, and is often considered as a part of normal adult development and socialization. Additionally, to varying degrees women identified with their drinking behaviours, ranging from "not much of a drinker" to "a drinker". It was evident that identifying with being a drinker affected on their attitudes and drinking behaviours. The women reported a range of intentions around alcohol and strategies that incorporated mindfulness. These themes are discussed in detail below.

7.2.5.1 Implicit Social Acceptance versus Awareness

Demonstrating a spectrum of awareness, the women perceived alcohol consumption as: an unquestioned 'natural' part of life; through to an expectation in many contexts, but still an individual's choice; through to being a source of frustration because it is so prevalent. Two of the women in their thirties expressed attitudes that typified the implicit social acceptance of drinking. For instance, "[Drinking was] a big part of life. It's very normal. It's just the way you go out and have fun." (Frances35) and "We don't put much thought into it. It's just a subconscious habitual thing that we do." (Ruby39). Awareness around alcohol consumption could remain low if a woman's drinking was similar to the social networks in her microsystem as it often went unquestioned among peers. For instance, one 30 year old woman highlighted how drinking did not need to be questioned as it was simply that she "knows how to have fun" (Tiffany30). Her tone and the way in which she described experimenting with different ways of drinking so that it would not inflame her allergies showed an unquestioning accommodation of alcohol despite suffering alcohol-related allergies.

In contrast, certain life experiences could be the catalyst that made drinking a “conscious” decision, rather than one being taken for granted. For instance, having a parent who drank excessively, the onset of alcohol-related health side effects, or change of partner, were all conveyed as raising awareness around alcohol consumption. Disparities between a woman’s drinking and her social environment could facilitate an adjustment of alcohol-related attitudes and behaviours, and raise awareness regarding alcohol consumption. Such increases in awareness could lead to frustration about the prevalence of alcohol consumption in her environment. These shifts in attitude from drinking as an implicit part of life to one of awareness of consequences and conscious decisions around drinking often resulted in a change in drinking behaviours. For instance, one woman described a shift in her attitude “It wasn’t necessarily that I enjoyed it or anything like that, it was just a need to fit in with everybody else. But as I’ve grown up and realised that I don’t...if I don’t like it why am I doing it?” (Elouise30)

7.2.5.2 Identity

Participants usually identified themselves, and labelled others, along the lines of being a “drinker” or “not a drinker”. Additional associations and labels existed that highlighted the relationship between alcohol and ‘fun’. That is, the need to drink was related to having or being fun and was accompanied by labels such as “party girl” or in contrast, “nana” (Eve23). The women described being both the subject, (e.g., Mandy28’s sisters call her the “the straighty of the family”), and the executor (e.g., Tiffany30 labelled her sister as “a stick in the mud”), of alcohol-related labels. The degree to which the women identified with drinking seemed related to their attitudes toward drinking and drunkenness and also influenced their perceptions of others’ drinking. Their attitudes also shaped their definitions of “a drinker”. For instance, Erin25 defined her father and partner as “not much of a drinker” even though they “drink most afternoons”. Her qualification of them not being ‘drinkers’ was based on them not having more than three beers per night, based on her own drinking identity as a point of reference. Notably, her AUDIT score indicated alcohol dependence. Identity has been shown to play an important role in addictive behaviours (Lindgren et al., 2012;

Young, 2011) and current findings might be underpinned by concepts of self-identity, social identity and normative influence (Fekadu & Kraft, 2001; Terry, Hogg, & White, 1999).

7.2.5.3 Attitude

It was evident that the women had definite attitudes relating to the advantages and disadvantages of drinking, and drunkenness, as well as attitudes around limiting consumption. These attitudes could potentially change over a lifetime.

7.2.5.3.1 Advantages and disadvantages of drinking

Advantages and disadvantages toward drinking and drunkenness varied between individuals and were often based on past experiences with alcohol. For example, the disinibitory effect that reduces awareness of one's social interactions was seen by many as an advantage. However, others perceived this effect as a disadvantage. Such findings are substantiated by previous research that discusses men's ambivalence toward alcohol and how that alters their motives for drinking (de Visser & Smith, 2007b). One woman's (Mia21) desire to "really let loose" contrasted with another's (Erin25) view that, "It's not a nice feeling to feel out of control."

Increased awareness around drinking could alter perceived advantages and disadvantages of drinking. For instance, after one woman (Erin25) met her partner her awareness increased and she started to view alcohol differently. Her interview data were littered with comparisons of pre-awareness attitudes that viewed alcohol very positively to post-awareness attitudes wherein she became more aware of the negative consequences of consumption.

Tolerance levels emerged as a notable influence on attitudes, especially with regard to whether women viewed alcohol consumption positively or negatively. Some women depicted conscious efforts to find a cut-off point as a way of attaining a positive drinking experience rather than one that resulted in hazardous side effects (e.g., loss of control; hangovers). The women who struggled to find such a cut-off point reported more frequent negative consequences and perceived more disadvantages. Hence, pursuits of individual cut-off points to counteract barriers to drinking

were evident. Previous research has discussed the relationship between self-control, letting loose and harm reduction (Ettorre, 2004).

7.2.5.3.2 *Accommodating alcohol*

When describing influences, the women alluded to aspects which both facilitated their drinking as well as barriers to drinking. Weight gain, allergies, harmful health effects of alcohol (e.g., hangovers; effects on breastmilk), safety risks, financial issues, and social disapproval were all mentioned as undesirable effects of alcohol. In the presence of barriers to drinking (e.g., health effects, financial cost) women sometimes found a way to accommodate alcohol. For one 25 year old woman, alcohol interfered with weight loss and allergies, but rather than ceasing or limiting her consumption, she chose low calorie, allergen-free alcohol. She identified appropriate drinks by getting "... a bottle and have a few drinks and if I feel bad the next day, you know more bad than just hung over, I'll probably not drink that anymore."(Bridget25)

Accommodating alcohol was also depicted through the women's descriptions of the trial and error of finding the cut-off point, as well as how they pursued early age drinking, in spite of not liking the taste of alcohol. One account exemplified alcohol accommodation, "I got sick of feeling embarrassed for being really drunk, so I really tried hard to work out where that point was and not to go over it."(Lisa34) In the face of adversity, some women appeared largely reluctant to limit their consumption, instead choosing to pursue drinking to gain perceived advantages.

I think it's a little bit like my insides understands. I will definitely reach a point some evenings where I'll... reach a point where I will just not feel like, I kind of almost feel sick, but kind of at that point where I'm you know, not actually going to be physically sick but if I keep drinking I might. So I switch to water at that point.(Laura27)

7.2.5.3.3 *Affective attitude*

It was evident that some of the women sought the effects of alcohol, especially with regard to the disinhibitory, relaxant, and anxiolytic effects. As outlined below, a substantial, yet somewhat complicated relationship between alcohol, social anxiety, and being in control of one's behaviour, was evident in the findings.

7.2.5.3.4 *Social facilitation and confidence*

Social facilitation refers to drinking to improve one's communication with others (M. S. Goldman et al., 1999). It was perceived by the women largely as advantageous and often cited as a reason to drink. One woman described how her anxiety in social situations was one of the strongest influences on increased consumption as alcohol offered "Dutch courage" (Lisa34) and enabled her social anxiety to be diminished. Similar effects of alcohol were sought as women stressed, "It breaks down barriers, especially with people like me who find it very hard to mix. Alcohol helps a lot." (Ada31) and "[I needed] social courage because I was shy and I think alcohol helped enormously." (Alex35)

A pattern emerged across the women's responses which showed relationships between alcohol, social facilitation and confidence. In many drinking contexts, the extent to which people were known to the woman could affect the amount a woman drank. Overall, the findings revealed that the women interviewed tended to align with one of the typologies outlined in Table 10.

Table 10

Three types of Drinkers - Relationship between Quantity of Alcohol Consumed and Familiarity of the Group

| | Strangers / Less familiar people | Friends / People know well |
|--------|--|---|
| Type 1 | Increase consumption Alcohol helps with confidence | Decrease consumption No need to boost confidence |
| Type 2 | Decrease consumption Do not trust people so drink less | Increase consumption Can relax and have a few drinks |
| Type 3 | Constant consumption Constant amount of alcohol consumed regardless of who is around. | |

Referring to Table 10, Type 1 women reported drinking at increased rates if in a social context where they did not know the people very well (Toni18, Mandy28, Ada31, Lisa34). In contrast, Type 2 women drank less around people that they did not know well because they did not trust them or wanted to stay “in control”(Eve23). However, if they were in company that they knew and trusted then they could relax and drink more. Type 3 women often described steady drinking patterns (e.g., abstinence, weekend drinking habits) and seemed less impacted by who was in their surroundings (Katie21, Erin25).

7.2.5.3.5 *Being in control or “letting loose” as a question of comfort or anxiety*

Discussions around drinking often highlighted the women’s levels of comfort or anxiety around “letting loose”. Some women viewed “letting loose” as advantageous. Others emphasised the importance of respectability, “You don’t want to make a mess of yourself and I don’t particularly want to throw up in public.”(April18) Attitudes toward being “out of control” ranged from totally unacceptable (April18), to just part of the drinking experience as long as it is appropriate to the

context (Erin25, Ada31). Similarly, Ettorre (2004) describe gendered substance use that takes into consideration self-control and respectability.

7.2.5.3.6 *Attitude toward drunkenness*

Attitudes toward drunkenness appeared to relate to the women's intentions and planning around drinking behaviour and paralleled the literature around "controlled loss of control" (Measham & Brain, 2005) and "determined drunkenness" (Measham & Brain, 2005). Positive attitudes related to being drunk and having fun, but not getting too "messy" or emotional (Tony18yo, Ada31yo). One woman's narrative had a large focus on "respectability", "You have to not lose yourself and still present yourself as a respectable person (April18)." In contrast, another woman expressed, "I do like the feeling of being drunk. I like feeling stupid in those kind of situations." (Laura27) Such polarity in attitude toward alcohol is exemplified in de Visser and Smith's (2007b) examination of how men can have ambivalent attitudes toward alcohol, wherein they wish to experience the positive effects of drinking without the negative ones. De Visser and Smith also discuss how sometimes, the conscious intention to drink to have fun sometimes slips into a more habitual drinking pattern. The current findings regarding women's intentions are discussed in the next section.

7.2.5.4 **Intention**

7.2.5.4.1 *A continuum from Abstaining to "Getting drunk"*

A continuum of alcohol-related intentions was evident in the women's accounts. They ranged from intentions to: not drink through to intentions to get drunk. Within this range, women expressed intentions to limit alcohol, depending on the situation with varying degrees of readiness. For instance, "I always knew what my intention was. Whether it was just to relax or whether I definitely wanted to have a few and let loose." (Eve23) Clear intentions meant planning was often evident to ensure that the intended behaviour was enacted "If I know beforehand I'll drink, I'll crash the night. I take my toothbrush and stuff. I'm more likely to drink if I want to." (Katie21) or "It's kind of planned and doesn't just happen." (Ada31) Often the younger women described intentions to "let loose" and planned increased consumption by keeping costs low and accessing 'happy hours' or more affordable

venues. These findings paralleled with Measham and Brain's (2005) determined drunkenness, wherein strategies are employed to facilitate getting drunk.

The women reported changes as they got older where the "intention" became about socializing and relaxing, rather than getting drunk. However, sometimes the intention to limit consumption went astray as habits took over and they got unintentionally drunk. In some instances, women reported becoming distracted by the social context and only recognizing that they were intoxicated when they stood up. Comparing intentions to get drunk and accounts of such incidental drunkenness, highlighted differences between intentions and behaviours (e.g., less pursuit of cheap alcohol) leading up to the intoxication. In contrast to "determined drunkenness" (Measham & Brain, 2005), incidental drunkenness was described by women who did not intentionally set out to get drunk but lacked mindfulness around their consumption and indicators of intoxication. "I've never had to count my drinks, but now it will be an accidental drunkenness. So without even knowing it I'll end up drunk."(Erin25) The following quote conceptualised incidental drunkenness as,

You can have a glass of wine and think oh I feel fine and then you have another, and then you have another and then you think oh I'm fine. And then you kind of.....realise you're drunk but you kind of don't realise it until the next day.(Alex35)

The concept of Incidental Drunkenness suggests consumption of alcohol in a habitual way, wherein the effects are only realised subsequently.

7.2.5.5 The Continuum from Mindfulness to Habit

To limit consumption, most of the women described the need to be mindful. Mindfulness was used if a woman intended to have only one or two drinks, or if she aimed to limit the degree of inebriation to a particular cut-off point. Some women used techniques learnt from past experience (e.g., watching the time or counting drinks) to maintain awareness around the current drinking experience and prevent them from slipping into habitual, less controlled, drinking. Two descriptions of mindfulness included, "The gradual feeling of getting drunker and drunker. I'm aware of each stage and I can stop it whenever I feel like it."(Lisa34) and "I don't want to get to the point where I

start feeling depressed. I'm conscious of my intake. As much as I want another wine, I'm not having more than two glasses in the evening.”(Rochelle29) Previous research has shown relationships between mindfulness, acting with awareness, attentional biases and alcohol misuse (Bodenlos, Noonan, & Wells, 2013; Garland, Boettiger, Gaylord, Chanon, & Howard, 2012).

7.2.6 Chronosystem

7.2.6.1 Changes within a Lifetime

The above levels of influence depict a snapshot in time. Across each of the levels there was also evidence of the chronosystem; or the changes which occur across time. Changes occurring across a woman's life span, such as meeting a partner, moving town, work changes, or having children, were reported as contributing to subsequent changes in exposure to different alcohol-related influences. Most of the women readily reported stage of life influences that affected alcohol-related attitudes and behaviour (e.g., where and how much alcohol was drunk). Such stage of life or role changes could lead to a change in responsibility and/or affect a woman's view of femininity. One woman reminisced (Eve23yo) about being single and “attractive to the opposite sex I guess every female when they go out wants to put a stamp on it...” and another reported changing her values and behaviours with her transition from being a single woman to her role as a mother (Elouise30yo). Chronosystem influences are epitomized by the role transition from single woman to mother. Alcohol no longer plays the role of a social facilitator in a nightclub to enable meeting a partner, but is used for relaxation in an environment suitable for children (usually the home). Finally, some women mentioned maturation, drinking experience and increased knowledge of cut-off points that reduced perceived disadvantages associated with drinking.

7.3 Conclusion

The interviews with the women in this study have provided an understanding of key factors impacting on their drinking across age cohorts and across multiple systems of influence. These findings reflected the complexity of factors that affect women's decisions regarding alcohol consumption and provide valuable knowledge on foci to target interventions to reduce risky drinking

behaviours. Our findings underlined how cultural, social (exosystem and microsystem), psychosocial and chronosystem factors influenced women in terms of their drinking behaviours and provided support for the BMHD (Bronfenbrenner & Morris, 2006).

It was at the most proximal levels (i.e., microsystem and psychosocial) that key influences readily emerged as the most direct and obvious influences for the women. Yet these proximal influences are all embedded in a larger social and cultural context that largely supports alcohol consumption and has an impact on women's drinking. Such findings are consistent with Bronfenbrenner's Model in that individuals have a direct relationship, and are actively engaged, with factors at a microsystem level even though these factors are themselves a function of the more distal or indirect influences (2006).

Additional support for Bronfenbrenner's framework (2006) was the extent to which factors were interrelated within and across levels. Two such examples of these multidirectional influences were: the interrelationship between the chronosystem and the other systems (across levels); and between an individual's social networks (microsystem) and her drinking identity and attitudes (psychosocial). Unlike previous studies which focus mainly on younger women's drinking (Griffin et al., 2010; Leyshon, 2008; Lindsay, 2006; Livingston et al., 2012) or from one level of influence (e.g. cultural or intra-individual; Fielder et al., 2009; Glindemann et al., 2007; Gullo et al., 2010; Hughes et al., 2011; Sheehan & Ridge, 2001), in this current study the influences on women's drinking across age groups were highlighted and thus offered a more comprehensive examination which took into account the different levels of influence. Figure 11 represents an overview of the findings and is followed by a discussion of the main themes and their interrelationships.

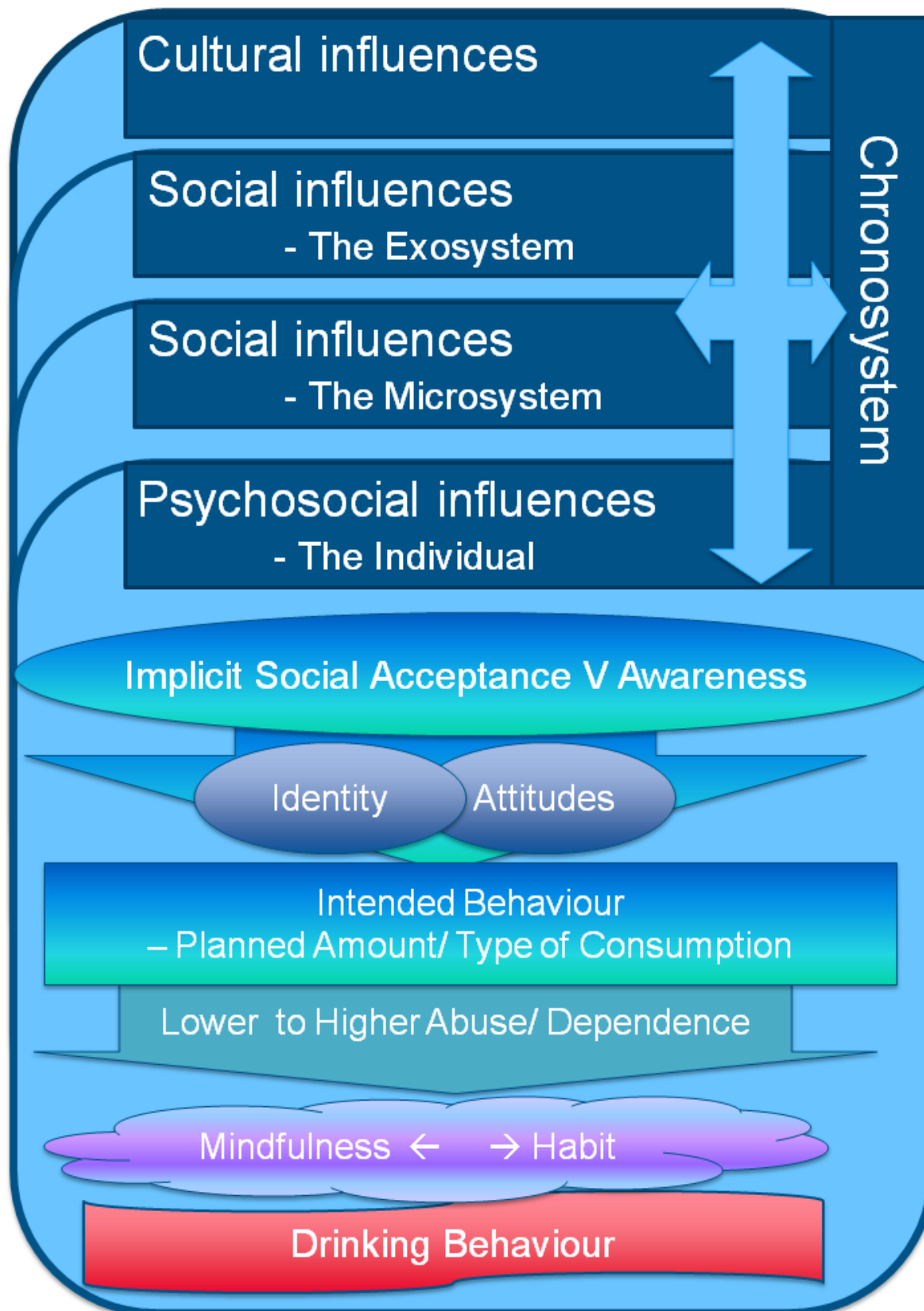


Figure 11. Model of Influences on women's drinking

Although the most obvious influences identified by the women in this study were at the microsystem and psychosocial levels, evidence of more distal influences demonstrated a need to focus interventions at multiple systems of influence. Particularly, the implicit social acceptance of alcohol in Australian culture appeared to influence women's awareness around drinking, wherein it was portrayed as valued and unquestioned in many contexts. Targeting interventions at multiple systems of influence on a health behaviour using multiple strategies could maximize the efficacy of such interventions (Boman, Bohlin, Eklöf, Forsander, & Törner, 2015; Cooley, Pedersen, & Mainsbridge, 2014; Van Horne et al., 2009).

As represented in Figure 11, the women's awareness regarding drinking appeared to filter their responses to alcohol. For instance, the cultural acceptance of socially prescribed alcohol consumption might go unquestioned unless a life experience raises awareness around the place of alcohol in a woman's life. Until that time, women might continue to: perceive alcohol in a more positive light; perceive others' expectations to drink as normal; identify with drinking behaviours; and accommodate alcohol in their lives. To raise awareness around the many influences on drinking that are present in a woman's life could enable women to question the role that alcohol has in their lives. Such awareness, as demonstrated by the women interviewed who had higher levels of awareness, could allow women to see drinking as a choice rather than an expectation and therefore possibly lessen the impact of social expectations to drink. One such example might be raising public awareness that barriers to consuming alcohol do not need accommodating (e.g., younger women do not need to learn to like the taste of alcohol but can rather opt out of drinking it). However, it is important to note in light of other findings within this study, that the social pressures on women to choose not to drink would be another barrier. Pressure on young people in particular to consume alcohol can be substantial as they can feel isolated in drinking situations and experience peer scrutiny if they choose to not drink (Conroy & de Visser, 2013a). Conroy and de Visser, (2013a) describe how, under peer scrutiny, young people's experience of peer pressure can lead to having to consciously decide whether to come out as a non-drinker or provide excuses.

The identification of a relationship between alcohol, confidence and social facilitation, brought to light the role of social anxiety and importance of familiarity in a woman's social context. Consistent with Ham and Garcia's review (2010), social skills training could possibly reduce reliance on alcohol for social facilitation in such contexts. However, further research is needed to examine the complexity of this relationship and how it impacts women's alcohol-related risks.

Although existing research addresses risks associated with "determined drunkenness" (Measham & Brain, 2005), less is known about the type of drunkenness that is framed in this chapter as incidental drunkenness. Compared with "determined drunkenness", differences in intentions and behaviours leading to incidental drunkenness are evident. Public awareness around incidental drunkenness could highlight that even in the absence of intentions to get drunk, accidental intoxication might still have its own set of risks. Even though further research is needed in this area, it would seem appropriate that a shift in intervention might be needed to align with the drinker's intentions. That is, differing interventions or messages are needed dependent on whether the intention is to get drunk, determined drunkenness, compared with not getting drunk but accidentally doing so, incidental drunkenness. Strategies might be as simple as having more prevalent visual cues in a woman's drinking surroundings that reinstate mindfulness. Visual cues (e.g., drink coasters, posters) could facilitate awareness around levels of inebriation or outline self-identified disadvantages of getting drunk or provide strategies (e.g., drinking water) to reduce drunkenness. Some women already described these natural points of intervention where they could regain mindfulness and employ strategies to reduce risks of further consumption. Greater awareness regarding incidental drunkenness and its associated risks could increase the implementation of such strategies and reduce risks.

Our findings highlighted the importance of changing exposure to alcohol-related influences that occurred across the lifespan. Life choices made (e.g., job transition; move) could alter a woman's attitudes and awareness around alcohol consumption and thus, ultimately her alcohol-related behaviours. The two main alcohol-related influences affected by life events were changes in: social

contexts and normative influences (microsystem factor → psychosocial) and the responsibility that came with a life event or role change (e.g., motherhood). Considering the latter, women might possibly have a different trajectory of drinking than men because of cultural influences or gender roles. Maturation in terms of drinking experience and finding the cut-off point appeared to also be a contributing factor.

7.4 Limitations and Future Research

Future research can build on these findings to be incorporated into targeted interventions. Based on the current findings, interventions focussed at microsystem and psychosocial levels might have the greatest impact. However, to focus exclusively at these levels would be limiting the potential effectiveness of any interventions because the findings also highlight that a woman's drinking is a complex behaviour resulting from multiple systems of influence. Although this exploration of women's drinking from a macroscopic perspective encompasses multiple systems of influence, more specific areas have been identified that call for increased focus leading to targeted interventions. There might be value in future research endeavors further exploring the relationship between infrastructure, public policy, legislation and alcohol-related harm prevention. Furthermore, it is evident that effective strategies to minimize incidental drunkenness could assist those women less likely to pursue determined drunkenness (Measham & Brain, 2005), but more likely to find themselves drunk. Finally, the women's accounts in this article emphasize the need for increased public awareness around prevention and early intervention to counteract the implicit nature of alcohol consumption in Australian culture that can lead to increased risks across the life span.

7.5 Refocussing the Lens from Broader Influences to the Individual's Psychosocial System

The observational study (Chapter 6) and interviews (current chapter) comprised Phase 1, the qualitative phase of the research. The approach of Phase 1 provided a focus on multiple systems of influence on women's drinking that ranged from the macroscopic cultural level through to the intra-individual psychosocial factors. Implicit social acceptance of alcohol and social network influence were found to be important influences in the wider context of women's drinking, much of

which flows through to be represented in the women's attitudes and beliefs. However, the interview data (Study 2) highlighted that, from the women's perspectives, proximal factors were more evident than the distal factors. This finding is in line with Bronfenbrenner's framework (2006) and the need to consider interventions targeted at multiple systems of influence. However, aligning with, and informed by the findings from Phase 1, the inductive phase, it was apparent that the focus of Phase 2 needed to be at the individual level.

The interview findings highlighted several themes that potentially aligned with the TPB (Ajzen, 1991) and that warranted further investigation. For instance, the women's attitudes regarding the advantages and disadvantages of drinking were consistent with behavioural beliefs regarding drinking outcomes. Table 11, below, outlines some of the alignments between Phase 1 findings and the TPB which were considered prior to the decision to apply the TPB. Hence, Phase 1 findings and subsequent application of the TPB in Phase 2 meant that the examination of women's alcohol consumption had refocussed on the psychosocial level. The following chapters (8, 9 and 10) document Study 3, presenting the survey methods, the extended TPB analysis and the critical beliefs analysis, respectively.

Table 11

Alignment of Study 2 Findings with Theory of Planned Behaviour Constructs

| Interview finding | Potential TPB alignment prior to Phase 2 |
|---|--|
| Attitudes – Advantages and Disadvantages | Behavioural beliefs – Costs/ Benefits |
| Accommodating alcohol | Interaction between Intention and Barriers |
| Affective attitude | Behavioural beliefs – Costs/Benefits |
| Attitudes toward drunkenness | |
| – How women control their drinking | PBC |
| Influence of social networks from microsystem | Subjective norms and Normative beliefs |

Chapter 8 - Phase 2 - Study 3 Methods

8.1 Introduction

This chapter documents the methods of Study 3 in the programme of research; the quantitative prospective design survey investigating the predictive utility of the TPB (Ajzen, 1991) in explaining intentions to, and subsequent engagement in, women's drink/drinking behaviours. It builds upon the previous chapters that outline the importance of focussing on the psychosocial influences on women's drinking. The survey in Study 3 lead to two sets of analyses to answer the distinct research questions presented in Chapter 4. The first analysis (see Chapter 9) measured the predictive utility of an extended TPB (Ajzen, 1991), including the additional constructs of awareness and self-identity, on women's intentions to, and subsequent engagement in, drink/drinking. The second analysis, (see Chapter 10) assessed the predictive utility of the beliefs underlining the standard constructs (i.e., behavioural beliefs, normative beliefs and control beliefs) in women's intention to, and subsequent engagement in, drink/drinking alcohol. It should be noted that manuscripts based on Chapters 9 and 10 have been submitted for consideration for publication in peer reviewed journals.

8.2 Study 3 Methods

8.2.1 Procedure

Ethical approval was obtained prior to commencement of the study. All participants were provided with an information sheet and submission of the questionnaire was deemed as consent. Participant recruitment was initiated by a media release (e.g., nationwide radio and newspaper interviews) and through subsequent snowballing. Additionally, there was recruitment of first year students at a large Australian university. The main aim of the recruitment strategies used was to survey the most representative sample and thus a broad array of online and offline recruitment strategies were undertaken (e.g., university emails, social media, women's groups by phone and email, leaflet distribution to women's support groups, shopping centre visits, university lectures, school social media, plus a media release via radio and print news). A link on the university website allowed

women recruited from the media coverage easy access to the survey. The research candidate invited women living in Australia, regardless of how much they did or did not drink to participate.

Dissemination of online questionnaires was via social networking sites (e.g., TwitterTM, FacebookTM), email lists and websites resulted in a sample of 1049 women. Hard copy questionnaires were provided to women who requested them and resulted in responses from 20 women.¹⁶ To ensure a large and representative sample, 1000 women were targeted for recruitment. Power analysis via G Power (Erdfelder, Buchner, & Lang, 2009) for multiple regressions with up to 10 predictors showed that an N of 1000 had more than adequate power for the intended analyses. Hence, the targeted sample size of 1000 provided both a high level of power for the analyses performed and a high level of external validity through a large and representative sample.

The aim of this study, in response to research questions 4 and 5 (Outlined in Chapter 4) was to survey the full spectrum of women in terms of those who did not drink to those who drank heavily, in order to examine a broad range of alcohol-related beliefs and intentions and behaviours. The three inclusion criteria were being female, aged 18 and above, and currently living in Australia.

8.2.2 - Participants

The main questionnaire was completed by 1069 women, of which 845 (79%) also completed the follow up questionnaire assessing their self-reported engagement in low risk, frequent and binge drinking. Ages ranged from 18 to 87 years ($M = 35$, $SD = 13.7$), 28% had high school certificates, 16.1% trade certificates; 31.5% undergraduate degrees and 24.4% postgraduate degrees. The participants identified with the following ethnic descents: Caucasian (86%); Asian (4%) ; Aboriginal and/or Torres Strait Islander origin (2%); Latin American (0.4%); Middle Eastern (0.2%); African (0.1%); other (6%) and 1.3% of participants did not answer.

The AUDIT (Saunders et al., 1993), showed a range of alcohol use behaviours ($N = 1058$, Cronbach's $\alpha = .80$). Using an adjusted cut-off of 7 (Babor et al., 2001; Caviness et al., 2009) results showed 61.6% ($n = 652$) of women scored in the low risk category; 30.6% ($n = 324$) as hazardous

drinking; 4.6% ($n = 48$) as harmful and 3.2% ($n = 34$) indicated alcohol dependence at baseline.

Eleven women did not complete the AUDIT at baseline, but were still included as part of the overall study wherein the sample size equalled 1069. Of the 845 women who completed the follow up survey, 837 completed the AUDIT and fell into the following categories: 63% ($n = 527$) scored low risk; 30.5% ($n = 255$) scored hazardous; 4.1% ($n = 34$) as harmful; and 2.5% ($n = 21$) indicating alcohol dependence.

8.2.3 Materials and Measures

Sociodemographic information (e.g. age, income and education level), the AUDIT (Saunders et al., 1993) and scales assessing the factors associated with the three distinct behaviours (i.e., low risk drinking, binge drinking and frequent drinking), were included in the main questionnaire, with the follow-up questionnaire asking participants to report the amount and frequency of their drinking (See Appendix J & K for an example of the main and follow-up questionnaires, respectively). The behaviours were: low risk drinking defined as drinking one or two drinks occasionally; frequent drinking defined as drinking 6 or more days in the one week; and binge drinking defined as drinking 5 or more standard alcoholic drinks on any one occasion. A standard drink guide was included in both questionnaires to aid assessment of drinking behaviours. Sections 8.2.3.1 and 8.2.3.2 outline the operationalising of the variables that were incorporated in the main questionnaire and the follow-up questionnaire. The questionnaire was piloted on five women ranging in ages from 35 years to 77 years old.

8.2.3.1 Main Questionnaire: Assessing Intentions to Drink (Stage 1).

Questions assessing intentions to drink, TPB constructs and the associated underlying critical beliefs, were based on the standard TPB self-report format (Ajzen, 2002, 2012; Fishbein & Ajzen, 2010). “Constructing a theory of planned behavior questionnaire”, (Ajzen, 2012) presents strategies, principles and examples pertaining to the development of a questionnaire to test the TPB and its constructs. Consistent with convention regarding TPB questionnaire design, the questions developed all adhered to Ajzen's (2012) TACT principle. That is, the target behaviour is defined in terms of the

elements of target, action, context and time. For example: the target element is ‘drinking on 6 or more days in a typical week’ (i.e., frequent drinking) or ‘drinking 5 or more drinks on any one occasion’ (binge drinking); the action element is the drinking; ‘in the next 2 weeks’ is the Time; and ‘in a typical week’ is the context. Further to this TACT principle, Ajzen (2012) discusses the need for compatibility between predictors and outcomes (e.g., the current study’s measure of attitude, subjective norm, PBC and intention is directly related to the target behaviour using the same TACT elements) and the need for specificity (e.g., using three discrete measures of drinking and not just drinking in general). The beliefs items were informed by Phase 1 of the project and developed in accordance with Ajzen’s (2012) questionnaire construction guidelines.

All items were scored on 7-point Likert scales to increase sensitivity to the question (Allen & Seaman, 2007) and in accordance with Ajzen (2012). The intentions scales ranged from “1 - strongly disagree” to “7 – strongly agree” and pertained to each of the targeted behaviours. For each behaviour, five items measured intention (e.g., “Do you agree that in the next 2 weeks... it is likely that I will engage in drinking on 6 or more days in a typical week?”). For each of the drinking behaviours assessed, attitude, subjective norm, PBC and intention were assessed. The additional predictors assessed were self-identity and awareness¹⁷. Unless otherwise stated, all items were scored on a 7-point likert scale ranging from “1 - strongly disagree” to “7 – strongly agree”. Table 13 (Chapter 9) presents the means, standard deviations and cronbach’s alpha for each of the scales.

8.2.3.1.1 *Attitude*

Attitudes toward low risk drinking, frequent drinking and binge drinking were each measured with a 6-item seven-point semantic differential (Osgood & Luria, 1954) scale. For example, “I think drinking 6 or more days per week (e.g., a glass or two of wine a night) would be . . . 1 Unpleasant to 7 Pleasant.”

¹⁷ Component Factor Analyses were conducted to assess the convergent and discriminant validity of the measures.

8.2.3.1.2 *Subjective norm*

Three items measured subjective norm for each of the behaviours (e.g., “Thinking about drinking 5 or more standard drinks on one occasion. . . Most people who are important to me would approve of me drinking 5 or more drinks on any one occasion.”)

8.2.3.1.3 *PBC*

Five items per behaviour measured PBC (e.g., “Thinking about drinking 6 or more days per week (e.g., a glass or two of wine most nights) . . . I have complete control over whether or not I drink 6 or more days per week.”)

8.2.3.1.4 *Awareness*

The awareness scale was a novel scale that drew upon Phase 1 of the research project. The current study conceptualized awareness as the extent to which women were conscious of the way in which they consumed alcohol and therefore, the extent to which engaging in a drinking episode was a thought-out conscious decision. Five items were developed to measure this construct based on the available literature (e.g. ref) and the responses of the women in study 2. An exploratory Principle Components Analysis indicated that the items represented a single factor with three of the items showing strong factor loadings (above .5): “Drinking alcohol is such a natural part of my life that I hardly think about it.” (reversed); “In certain situations, I don’t really think about it, but just assume that I am going to have an alcoholic drink.” (reversed); and “Every single time I have a drink it is a very thought-out conscious decision.” The average of these three items was used as a measure of awareness. The alpha reliability of these three items was moderately high ($\alpha = .64$).

8.2.3.1.5 *Self-Identity*

The self-identity scale was a novel scale that drew upon Phase 1 of the research project as well as existing research, which conceptualizes self-identity in terms of the self being perceived in relation to a particular behaviour or identifying with particular roles (Gardner, de Bruijn, & Lally, 2012; Lindgren et al., 2013; Terry et al., 1999). Four items based on the concepts and previous measures of self-identity (Rise, Sheeran, & Hukkelberg, 2010; Sparks & Shepherd, 1992) measured the women's

identification with being a drinker were developed to measure this construct based on the available literature (e.g. (Rise, Sheeran, & Hukkelberg, 2010; Sparks & Shepherd, 1992) and the responses of the women in Study 2. An exploratory Principle Components Analysis indicated that the items represented a single factor with all of the items showing strong factor loadings (above .5). The average of these four items was used as a measure of self-identity. The alpha reliability of these items was high (alpha = .80). They included: “I think of myself as a drinker.”; “I am the type of person who enjoys a drink.” “I am the type of person who doesn’t mind getting a bit drunk.” and “I think of myself as fun because I have a few drinks.”

8.2.3.1.6 *Normative beliefs*

Five items measured normative beliefs, with normative referents including one’s partner, family, friends and professional/work colleagues. The fifth item stated, “Having concerned family members or friends would stop me from drinking.”

8.2.3.1.7 *Behavioural beliefs*

Asking participants, “How likely is it that the following would occur as a result of you drinking alcohol?” 16 items (8 benefits and 8 costs) measured behavioural beliefs. (e.g., “Having a drink containing alcohol would. . . ‘Help me to talk with others’ [benefit] or ‘Make me sick in the short term’ [cost].”)

8.2.3.1.8 *Control beliefs*

Providing the context, “How likely is it that the following would STOP you from drinking alcohol?” participants were asked 12 items to assess barriers to drinking (e.g., “The following factors would stop me from drinking ... Being pregnant or breastfeeding.”). With the precursor “How likely is it that the following would INCREASE the possibility of you drinking alcohol?” 13 items assessed facilitators of drinking (e.g., “The following would increase the chances of me drinking... If it was my birthday.”)

8.2.3.2 *Follow-up Questionnaire: Assessing engagement in behaviours (Stage 2)*

Two weeks after Stage 1 was conducted participants were asked to report their drinking behaviour over the interim period from the Stage 1 main survey. The two week follow-up was

considered the most appropriate timeframe. Two weeks provided sufficient time to capture possible variations in behaviour, but not so much that recollection of drinking episodes would be unreliable. Participants were asked to report the quantity of alcohol they had consumed, "In the last 2 weeks if you drank alcohol, how many standard alcoholic drinks did you have on a typical drinking occasion?" which assessed the amount that they drank and allowed assessment of low risk drinking. Consistent with the NHMRC's (2009) guideline to reduce long term alcohol-related risks, the cut off for low risk drinking was no more than 2 standard drinks per day.

Frequency of drinking was assessed by asking participants "In the last 2 weeks, on how many days did you have a drink containing alcohol?" The frequent drinking cut off was drinking on 12 or more days within the 14 days, which was relative to if a participant drank on 6 or more days in the one week. The cut-off was determined taking into consideration the recommendation that one should have two alcohol-free days per week (ICAP, 2010). The Australian guidelines removed the recommendation to have two alcohol-free days in one week when the guidelines changed in 2009 (NHMRC, 2009). However, the cut-off for frequent drinking in the current study was operationalised as such because of previous guidelines and as other countries' guidelines (e.g., Germany, Poland) maintain this recommendation (ICAP, 2010; NHMRC, 2009).

Finally, consistent with the main survey's assessment of binge drinking, participants were asked to select "Never, Once, Twice, 3 times, 4 times or 5 or more times in response to the question, "In the last 2 weeks how often did you have 5 or more standards drinks on any one occasion?" These cut-offs are in line with the Australian health guideline that recommends having no more than 4 standard drinks on any one occasion to reduce risk on a single occasion (NHMRC, 2009). Participants who selected once or more were classified as having engaged in binge drinking. This question allowed an examination of the extent to which the women were engaging in binge drinking. Differences on key variables between respondents who only completed the main questionnaire compared with those who completed the final questionnaire were assessed via T-tests (presented in Table 12 below).

Table 12

Differences between Main Questionnaire Respondents and Follow-Up Respondents

| Variable | | Main Questionnaire Only <i>n</i> = 222 | | Both Main and Follow- Up Questionnaire <i>n</i> = 845 | | t-test | <i>p</i> value |
|------------------------|----------|--|-----------|---|-----------|--------|----------------|
| | | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | |
| Age | | 34.48 | 14.35 | 34.57 | 13.53 | 0.086 | .932 |
| Income | | 4.42 | 2.12 | 4.70 | 2.16 | 1.728 | .084 |
| Education | | 3.42 | 1.15 | 3.55 | 1.14 | 1.443 | .149 |
| AUDIT | | 7.55 | 5.89 | 6.53 | 5.13 | -2.355 | .019 |
| Drinking Intentions | Low Risk | 4.47 | 1.51 | 4.53 | 1.46 | 0.538 | .591 |
| | Frequent | 2.09 | 1.25 | 1.97 | 1.20 | -1.249 | .212 |
| | Binge | 3.00 | 1.47 | 2.75 | 1.48 | -2.222 | .026 |

*** $p < .001$ Two-tailed test $N = 1067$

Note: M = Mean; SD = Standard Deviation. Income and education were measured as ordinal variables (measured on a scale from \$0 per week to more than \$3001 per week, and from Primary school to University – postgraduate degree, respectively). The median income bracket was \$AUD1201-1600/week (\$AUD62 401 – 62 400 per annum) and the median education level was women with an university undergraduate degree. All other variables (except for age) were measured on a 7 point likert scale.

8.2.4 Drinking Behaviours – The Outcome Variables

Frequent drinking, as well as low risk and binge drinking, was included in Study 3 for a number of reasons. Firstly, research indicates that the amount, frequency and duration of alcohol consumed, should be considered when measuring the effects and risks of alcohol consumption (Gunzerath et al., 2004; NHMRC, 2009). Secondly, Australian guidelines indicate long term risks associated with high frequency of drinking and the need to examine frequency as well as quantities of

consumption (NHMRC, 2009). Finally, differing patterns of alcohol use according to age and gender (Makela et al., 2006), and the assertion that there is a “narrow window of safe drinking for women” (Nolen-Hoeksema, 2004, p. 1000) substantiate the need to capture these varying drinking behaviours.

Examination of the extended TPB (Chapter 9) was measured against the two risky drinking behaviours; namely, frequent drinking and binge drinking. Examination of the critical beliefs underlying the standard TPB constructs included assessment of low risk drinking, as well as frequent and binge. The critical beliefs analysis (as presented in Chapter 10) sought to compare underlying beliefs between the three drinking behaviours. Hence, whilst the extended TPB analysis allowed prediction of risky drinking, the critical beliefs analysis facilitated exploration of the women's general beliefs around alcohol consumption and how they differed across a range of drinking behaviours.

8.2.5 – Concluding Remarks

This chapter, Chapter 8, has provided details of the methods used in Study 3, the quantitative survey. From the survey data, two sets of analyses were performed. These analyses allowed examination of the predictive utility of an extended TPB (Chapter 9) and the underlying critical beliefs (Chapter 10) on women's drinking. These analyses are presented in the following chapters.

Chapter 9 – The Predictive Utility of an Extended TPB

9.1 Introduction

The previous chapter (Chapter 8) detailed the methods of Study 3 (the survey). This current chapter, Chapter 9, presents the analysis focussed on research questions 4 and 5 (See Chapter 4). The sub-questions for this current analysis were: 1. To what extent do subjective norms, attitudes and PBC predict women's intentions to consume alcohol in harmful ways?; 2. To what extent do women's PBC and intentions to frequent drink and binge drink predict engagement in these drinking behaviours?; 3. Are there additional psychosocial predictors of women's drinking explaining variance over and above the standard TPB constructs?; and 4. To what extent do all of these constructs (i.e., TPB variables, sociodemographic variables, awareness and self-identity) also directly predict engagement in these risky drinking behaviours?

Past behaviour is taken to be a consistent strong predictor of current behaviour (Conner, Norman & Bell., 2002; Dean et al., 2012). Consistent with many TPB papers the current study examined only the influence of predictors on current behaviour (Gardner et al., 2012; Hamilton & White, 2008; Hamilton & Schmidt, 2014). The TPB variables have been described previously, in Chapters 2 and 8. Section 9.2, below, discusses the additional variables examined in the current analysis.

9.2 Rationale for Inclusion of the Additional Variables

As previously discussed, Phase 2 was built upon the findings of Phase 1. Hence, the selection of the additional variables extending the TPB was informed by the prominence of these variables in Phase 1, together with extant research evidence regarding the predictive and explanatory value of these additional variables. This section (Section 9.2) discusses the additional variables.

9.2.1 Awareness versus Implicit behaviour

Study 2 (the interviews) highlighted how women varied in their awareness of their alcohol consumption, ranging from drinking being an unquestioned implicit behaviour to being a more deliberate conscious choice that took into consideration the effects of alcohol relevant to that

individual. This finding is consistent with a number of similar constructs found in the addictive behaviours literature (Fernandez, Wood, Stein, & Rossi, 2010; Ostafin, Marlatt, & Greenwald, 2008) that discuss awareness (in contrast to automaticity or implicit cognitions) as an important component of addictive behaviour and impulse control. These perspectives often outline automatic mental processes that underpin certain behaviours (Ostafin & Marlatt, 2008).

Behaviours, like drinking alcohol, may start out as a conscious decision involving awareness, but can become automatic and implicit (Bargh, 1994; Ostafin & Marlatt, 2008). Dual process models of addiction (Wiers et al., 2007) suggest a tension between automatic and controlled cognitive processes, wherein the more conscious controlled cognitions reduce addictive behaviours. Further, awareness may also reduce risky drinking by way of interrupting impulsive behavioural tendencies such as those found in addictive behaviours (MacKillop, Mattson, Anderson Mackillop, Castelda, & Donovan, 2007). The current study conceptualized awareness as the extent to which women were conscious of the way in which they consumed alcohol and therefore, the extent to which engaging in a drinking episode was a thought-out conscious decision.

9.2.2 Self-identity

There is considerable literature that espouses the importance of self-identity with regards to addictive behaviours (Gardner et al., 2012; Lindgren et al., 2013; Rise et al., 2010; Sparks & Shepherd, 1992). Existing research highlights the importance of self-identity with regard to drinking behaviours and interventions to reduce risky drinking (Gardner et al., 2012). Drinking identity (e.g., “drinker” compared with “non-drinker”) has been found to be a strong and reliable predictor of drinking behaviours (Gardner et al., 2012; Lindgren et al., 2013). Additionally, self-identity has been used in a number of studies utilising an extended TPB that support its use in models of addictive behaviours (Gardner et al., 2012). Self-identity has been conceptualized in terms of the self being perceived in relation to a particular behaviour or identifying with particular roles (Gardner et al., 2012; Lindgren et al., 2013; Terry et al., 1999). Hagger et al. (2007) found that self-identity contributed unique variance to the standard TPB constructs, but did not significantly predict

intentions or behaviour directly (i.e., self-identity indirectly influenced intentions). In contrast, Conner et al. (1999) found that self-identifying as a drinker explained intentions to drink, over and above the TPB constructs.

9.2.3 Sociodemographic variables

The TPB predicts that sociodemographic variables will be subsumed by the TPB constructs (Ajzen, 1991). However, in light of research that indicates a number of important sociodemographic predictors of women's drinking behaviours (Lindsay, 2006; Measham & Ostergaard, 2009), the sociodemographic variables of age, education level and income were included in the current analysis by way of controlling for their potential effects.

9.3 The Aims of the Extended TPB Analysis

To further understand women's drinking, an extended TPB model was used to examine frequent drinking (i.e., drinking alcohol on six or more days in a week) and binge drinking (i.e., drinking five or more standard drinks on any one occasion). Stage 1 of the research examined the predictive utility of the TPB variables (attitude, subjective norm and PBC) on intentions to engage in frequent drinking and binge drinking. Stage 2, conducted two weeks post Stage 1, examined self-reported engagement in frequent and binge drinking as a function of the TPB constructs of intention and PBC.

Consistent with the TPB, it was expected that for each of the drinking behaviours, more positive attitudes toward the behaviour and increased perceptions of approval by important others would be associated with stronger intentions to engage in such drinking behaviours (i.e., frequent and binge). Whilst contrary to research and theory that expects a positive relationship between PBC and intention (Ajzen, 1991), this current study predicted that reduced PBC would be associated with stronger intentions to engage in alcohol consumption. This is consistent with a number of TPB applications especially with regard to drinking behaviours (Conner et al., 1999; Servo, 2008). Moreover, it was expected that the extended variables of awareness and self-identity are separate to and would explain additional variance in the drinking behaviours over and above the standard TPB constructs. Specifically, it was expected that a decreased level of awareness regarding one's drinking would be

associated with greater intentions to drink and the greater the extent to which women identified as drinkers, the greater their intentions to consume alcohol.

9.4 Method – The Variables for this Analysis

As discussed in Chapter 8, for each of the relevant drinking behaviours the main questionnaire measured the following constructs pertaining to the examination of the extended TPB model: attitude, subjective norm, PBC, and intention. Awareness and self-identity were also measured. Pertaining to this analysis, self-reported frequency and engagement in drinking 5 or more standard drinks on any one occasion was assessed in the follow-up questionnaire in order to measure engagement in frequent and binge drinking, respectively. Further details of the methods used in Study 3, on which this analysis is based, are presented in Chapter 8.

9.5 Results

9.5.1 Preliminary analysis

Prior to conducting the regression analyses, items were recoded so that high scores consistently reflected stronger agreement. Mean scale totals were calculated, with items being reversed where appropriate, and reliability analyses performed (Cronbach's alpha). Table 13 shows the inter-item reliability (Cronbach's alpha) for the scales were acceptable (i.e., all above .59). In the process of data cleaning, cases with missing data were inspected for potential patterns that may indicate a bias, of which none existed. Missing data were primarily from those participants who did not complete all questions toward the end of the questionnaire, of which there was no point that participants regularly stopped at. Cases with substantial missing data were removed. Outliers were removed in the initial data cleaning. During the regression analyses, missing data were excluded listwise and so sample sizes in the analyses may be slightly different.¹⁸

¹⁸ *t* tests were conducted to determine if there were any significant differences between participants who completed the follow-up questionnaire compared to those who did not. Results confirmed no significant difference in scores for age, $t(1067) = .086, p = .932$ nor for income, $t(1053) = 1.728, p = .084$.

Bivariate correlations were used to check the relationships between variables, with no evidence of multicollinearity found. All correlations were below .75 All tolerance values were greater than .10 (Lowest were .491, .538, and .424, for low risk, frequent and binge drinking respectively) and variance inflation factors less than 10 (Highest were 2.035, 1.857, 2.359 for low risk, frequent and binge drinking respectively). All assumptions of regression as outlined in Tabachnick and Fidell (2001) were met.

9.5.2 Descriptive analysis

Means, standard deviations and Cronbach's alphas for the variables are presented in Tables 13 and 14. Bivariate correlations are presented in Appendix L. The tables show that each of the TPB variables for frequent drinking and binge drinking are significantly correlated ($p < .001$) with each other. All were positively correlated with intention with the exception of PBC which was negatively correlated with intention.

Table 13

Means, standard deviations and alpha coefficients for variables used in Stage 1 (Hierarchical regressions) N = 1069

| | Variable | <i>M</i> | <i>SD</i> | α |
|----------|-------------------------------|----------|-----------|----------|
| Frequent | 1. Intention – Frequent | 2.00 | 1.21 | .83 |
| | 2. Attitude – Frequent | 2.94 | 1.24 | .84 |
| | 3. Subjective Norm - Frequent | 2.09 | 1.18 | .81 |
| | 4. PBC – Frequent | 6.48 | 0.86 | .82 |
| Binge | 5. Intention – Binge | 2.80 | 1.48 | .87 |
| | 6. Attitude – Binge | 3.50 | 1.40 | .89 |
| | 7. Subjective Norm - Binge | 2.71 | 1.47 | .83 |
| | 8. PBC- Binge | 6.15 | 1.09 | .87 |
| | 9. Age | 34.55 | 13.70 | n/a |
| | 10. Education | 3.52 | 1.14 | n/a |
| | 11. Income | 4.64 | 2.16 | n/a |
| | 12. Awareness | 4.39 | 1.37 | .64 |
| | 13. Self-Identity | 3.92 | 1.41 | .80 |

Note: *M* = Mean; *SD* = Standard Deviation. Income and education were measured as ordinal variables (measured on a scale from \$0 per week to more than \$3001 per week, and from Primary school to University – postgraduate degree, respectively). The median income bracket was \$AUD1201-1600/week (\$AUD62 401 – 62 400 per annum) and the median education level was women with an university undergraduate degree. All other variables (except for age) were measured on a 7 point likert scale.

Table 14

Means and standard deviations for the variables used in Stage 2 (Logistic regression)

N = 845

| | Variable | <i>M</i> | <i>SD</i> |
|----------|---------------------|----------|-----------|
| Frequent | 1. Intentions | 1.97 | 1.20 |
| | 2. PBC | 6.51 | 0.82 |
| | 3. Attitude | 2.97 | 1.27 |
| | 4. Subjective Norms | 2.06 | 1.16 |
| Binge | 5. Intentions | 2.75 | 1.48 |
| | 6. PBC | 6.19 | 1.06 |
| | 7. Attitude | 3.47 | 1.40 |
| | 8. Subjective Norms | 2.66 | 1.45 |
| | 9. Age | 34.57 | 13.53 |
| | 10. Education | 3.55 | 1.14 |
| | 11. Income | 4.70 | 2.16 |
| | 12. Awareness | 4.41 | 1.37 |
| | 13. Self-Identity | 3.90 | 1.43 |

Note: *M* = Mean; *SD* = Standard Deviation. Income and education were measured as ordinal variables (measured on a scale from \$0 per week to more than \$3001 per week, and from Primary school to University – postgraduate degree, respectively). The median income bracket was \$AUD1201-1600/week (\$AUD62 401 – 62 400 per annum) and the median education level was women with a university undergraduate degree. All other variables (except for age) were measured on a 7 point likert scale.

9.5.3 Stage 1 - Hierarchical multiple regression examining intentions to drink alcohol

Hierarchical multiple regressions were conducted to measure the predictive ability of the standard TPB constructs and extended variables on women's intentions to drink alcohol. In accordance with assessing the predictive utility of the TPB on its own, the standard TPB variables were entered into Step 1, additional variables were entered into Step 2, with the sociodemographic variables controlled for at Step 3.¹⁹ The decision to enter the demographics in the final step of the regression allows testing of the TPB's assertion that the model should subsume the demographics (Ajzen, 1991; O'Hara, Harker, Raciti, & Harker, 2008)²⁰. Thus the regression order allows testing of the predictive utility of the TPB and to check if any demographic variable explains additional variance over and above the standard TPB constructs. This assertion was of particular interest in the current study considering existing research that shows different drinking behaviours for women as a function of their age (ABS, 2009b, 2012a; Makela et al., 2006).

9.5.3.1 Frequent drinking – Intentions to drink six or more days in a week

Examining intentions to engage in frequent episodes of drinking, Table 15 shows that the standard TPB variables (Step 1) accounted for a significant 38.1% of the variance, $R^2 = .381$, $F(3, 1025) = 209.97$, $p < .001$. The extended variables added a significant 1.4% at step 2, $\Delta R^2 = .014$, $F(2, 1023) = 11.78$, $p < .001$, whilst the sociodemographic variables entered into step 3 added a further significant 1.5% of the variance, $\Delta R^2 = .015$, $F(3, 1020) = 8.83$, $p < .001$. The overall model was significant, explaining 41% (40.5% adjusted) of the variance in intentions, $F(8, 1028) = 88.56$, $p < .001$. All three TPB constructs (attitude, subjective norm, and PBC), as well as age and awareness, were significantly associated with intentions to drink on six or more days in a week in the final step of the model. Whilst awareness was able to add significant variance with a negative relationship with intentions, self-identity approached, but did not achieve statistical significance at $p = .011$.

¹⁹ Due to the large sample size, it was deemed appropriate to assess significance at a more stringent alpha level of .01

²⁰ As a check, the regression was also run with demographics first with little difference in the results found.

9.5.3.2 Binge drinking – Intentions to drink five or more drinks on any one occasion

As shown in Table 15, the standard TPB variables were significantly associated with intentions to binge drink accounting for a significant 51.5% of the variance, $R^2 = .515$, $F(3, 1030) = 365.01$, $p < .001$. Inclusion of the extended variables at step 2 accounted for a further significant 2.6% of the variance, $\Delta R^2 = .026$, $F(2, 1028) = 29.62$, $p < .001$. An additional significant 2.6% of the variance was explained by the sociodemographic variables entered into step 3, $\Delta R^2 = .026$, $F(3, 1025) = 20.58$, $p < .001$. With the overall model being significant and explaining 56.8% (56.4% adjusted) of the variance in intentions, $F(8, 1033) = 168.28$, $p < .001$, at the final step of the model, all TPB variables, age, income, awareness and self-identity emerged as significant predictors of intentions to binge drink.

Table 15

Hierarchical multiple regression results predicting intentions to drinks – Frequent drinking and Binge drinking

| | | Frequent Drinking <i>N</i> = 1029 | | | Binge <i>N</i> = 1034 | | |
|----------------|------------------|-----------------------------------|----------|-----------------|-----------------------|----------|-----------------|
| Variable | | R ² Change | β | sr ² | R ² Change | β | sr ² |
| Step 1 | Attitudes | | .270*** | .057 | | .497*** | .162 |
| | Subjective Norms | | .132*** | .013 | | .164*** | .019 |
| | PBC | | -.418*** | .159 | | -.229*** | .045 |
| | | 38.1%*** | | | 51.5%*** | | |
| Step 2 | Attitudes | | .255*** | .042 | | .381*** | .071 |
| | Subjective Norms | | .128*** | .013 | | .158*** | .018 |
| | PBC | | -.415*** | .154 | | -.176*** | .024 |
| | Awareness | | -.148*** | .012 | | -.038 | .001 |
| | Self-Identity | | -.127*** | .009 | | .193*** | .016 |
| | | 1.4%*** | | | 2.6%*** | | |
| Step 3 | Attitudes | | .240*** | .037 | | .325*** | .048 |
| | Subjective Norms | | .122*** | .012 | | .133*** | .012 |
| | PBC | | -.399*** | .140 | | -.163*** | .021 |
| | Awareness | | -.132*** | .009 | | -.080** | .004 |
| | Self-Identity | | -.084 | .004 | | .202*** | .017 |
| | Age | | .127*** | .012 | | -.111*** | .009 |
| | Education Level | | .002 | .000 | | -.041 | .001 |
| | Income | | .006 | .000 | | -.076** | .005 |
| | | 1.5%*** | | | 2.6%*** | | |
| Total Variance | | 41%*** | | | 56.7%*** | | |

*** $p < .001$ ** $p < .01$

9.5.4 Stage 2 - Logistic regression examining self-reported engagement in the behaviour

Logistic regressions were conducted to primarily examine the influence of intentions and PBC on actual engagement in high frequency drinking or binge drinking behaviours. Of the 845 women who participated in the follow up questionnaire, 51 engaged in frequent drinking, so six or more days in the one week (794 did not frequent drink), and 271 women engaged in binge drinking, so consuming five or more standard drinks on any one occasion (574 did not binge drink). To control for the variables that are not expected to have a direct influence on behaviour, attitude, subjective norm, awareness and self-identity were entered at step one of the regression. Intentions and PBC were entered at step 2 with the demographic variables entered in the final step. Assessed in the follow-up questionnaire, the behavioural outcomes were dichotomous, being coded as 0 (not engaged in) and 1 (engaged in), where 1 was the target outcome category. The models were statistically significant for both drinking behaviours (See Tables 16 and 17). The model predicting frequent drinking explained 21.8-59.9% (Cox & Snell $R^2 = .218$; Nagelkerke $R^2 = .599$) of the variance, $\chi^2(9, N = 817) = 201.38$, $p < .001$. Results showed that age and intention to drink six or more days in a week was significantly ($p < .01$) associated with this self-reported engagement in this behaviour. Finally, after all variables were entered, intention and self-identity were significant predictors of actual engagement in binge drinking, $\chi^2(9, N = 822) = 318.70$, $p < .001$, with between 32.1-44.9% (Cox & Snell $R^2 = .321$; Nagelkerke $R^2 = .449$) of the variance explained.²¹

²¹ Moderation effects of age were checked and the relationships were consistent across age categories.

Table 16

Logistic regression predicting the probability of engaging in Frequent Drinking

| | | Frequent Drinking | | N= 840 | |
|----------|-----------------|-------------------|-----|----------|-------------------|
| Variable | | B | SE | Wald | Exp(B) [95%CI] |
| Step 1 | Attitude | .44 | .23 | 3.63 | 1.55 [.99, 2.45] |
| | Subjective Norm | .12 | .19 | .37 | 1.12 [.77, 1.64] |
| | Awareness | -.26 | .22 | 1.34 | .78 [.50, 1.19] |
| | Self-Identity | .18 | .23 | .64 | 1.20 [.77, 1.88] |
| Step 2 | Intentions | 1.02 | .19 | 29.89*** | 2.77 [1.92, 4.00] |
| | PBC | -.41 | .20 | 4.40 | .66 [.45, .97] |
| Step 3 | Age | .05 | .02 | 7.32** | 1.05 [1.01, 1.09] |
| | Education | .26 | .20 | 1.69 | 1.30 [.88, 1.93] |
| | Income | -.15 | .11 | 1.67 | .86 [.69, 1.08] |

*** $p < .001$ ** $p < .01$

Table 17

Logistic regression predicting the probability of engaging in Binge Drinking

| | | Binge Drinking | | N= 841 | |
|----------|-----------------|----------------|-----|-----------|-------------------|
| Variable | | B | SE | Wald | Exp(B) [95%CI] |
| Step 1 | Attitude | .14 | .11 | 1.56 | 1.15 [.92, 1.43] |
| | Subjective Norm | -.11 | .08 | 1.90 | .90 [.76, 1.05] |
| | Awareness | -.22 | .09 | 5.96 | .80 [.67, .96] |
| | Self-Identity | .43 | .11 | 14.72**** | 1.54 [1.23, 1.91] |
| Step 2 | Intentions | .62 | .09 | 43.87**** | 1.85 [1.54, 2.22] |
| | PBC | -.14 | .10 | 1.87 | .87 [.72, 1.06] |
| Step 3 | Age | -.00 | .01 | .16 | 1.00 [.98, 1.01] |
| | Education | .05 | .10 | .32 | 1.06 [.88, 1.27] |
| | Income | .01 | .05 | .02 | 1.01 [.91, 1.11] |

**** $p < .001$ ** $p < .01$

9.6 Discussion

This study examined the extent to which an extended TPB was able to account for variability in intentions to, and actual (self-reported) behavioural engagement in frequent drinking and binge drinking. Overall, all standard TPB constructs were significantly associated with intentions to frequent and binge drink in directions consistent with theoretical predictions.

9.6.1 Influence of the TPB variables

Overall, this study provides support for the TPB as a predictor of alcohol-related intentions and behaviours, and is consistent with other studies (Ajzen & Sheikh, 2013). As expected, those participants with a more positive attitude toward each of the drinking behaviours, who perceived greater approval from important others, and who had a reduced perception of control over the drinking behaviour, were each associated with a reported increased intention to engage in that particular drinking behaviour. It is worth noting that whilst many TPB studies report a positive relationship between PBC and intention, which is in accordance with the theory (Ajzen, 1991), others, such as this study, have found a negative relationship between PBC with intentions to engage in negative behaviours such as drinking (Conner et al., 1999; Norman & Conner, 2006).

In Stage 1 of the current study, significant negative relationships were apparent between PBC with intention for both of the drinking behaviours examined. The relationships illustrated that, as PBC diminishes, intentions increase, consistent with previous evidence (Conner et al., 1999). One possible reason for this relationship is that certain types of alcohol consumption are negatively evaluated (attitudes are negative) and so higher perceived control would be related to reduced intentions to engage in the drinking behaviour (Conner et al., 1999).

All three TPB constructs remained significant predictors of intentions to engage in frequent drinking and binge drinking. Despite previous evidence suggesting subjective norms may be the weakest predictor within the TPB, in this study, subjective norms remained a significant predictor for intentions to frequent and binge drink. Hence, what important others think appears to have an impact upon one's intentions to engage in risky drinking. This finding is consistent with the idea that norms are important predictors of alcohol consumption and possible foci of intervention (Neighbors et al., 2008).

Overall, the results indicate that interventions supported by similar health behaviour research (K. J. Johnston & White, 2003; Marcoux & Shope, 1997) could reduce risks associated with frequent drinking or binge drinking. Skill-building interventions could aid individuals with strategies they

could use to better resist peer pressure (Marcoux & Shope, 1997) and increase their perceptions of behavioural control over such intentions to drink (e.g., developing communication and behavioural repertoires in order to plan for times when they would be exposed to high risk drinking and peer pressure). Interventions focussed on changing individuals' positive attitudes toward frequent drinking and binge drinking, targeting perceptions of significant others approving of the behaviours, as well as increasing perceptions of one's control could be useful in curbing women's excessive alcohol consumption.

9.6.2 Influence of the additional variables

9.6.2.1 Awareness

As hypothesized, for both drinking behaviours, awareness was a significant determinant of intentions. Although awareness was not a significant predictor of intentions to binge drink at step 2, it did reach significance when the demographic variables were entered at the third step. The beta values of Awareness across Step 2 and 3 did not change substantially. It would therefore appear that the reduction in unaccounted variability in intentions to binge drink was accounted for by the addition of demographics. After including the demographics, this reduction in unaccounted variability was thus sufficient for the unique variance in intentions, accounted for by awareness, to reach significance. Correlations between variables revealed negative relationships with intentions, so that the less aware or conscious of her alcohol consumption, the more a woman was likely to intend to engage in risky drinking behaviours.

Such findings are consistent with other addictive behaviour research that has focussed on automaticity or implicit processes and lack of awareness underlying substance use (Maas, Hietbrink, Rinck, & Keijsers, 2013; Ostafin & Marlatt, 2008). Hence, for a behaviour, like drinking alcohol, that may start out as a conscious decision involving awareness it may become an automatic implicit process (Bargh, 1994; Ostafin & Marlatt, 2008). Countering such implicit alcohol use, research has examined mindfulness, particularly the "acting with awareness" facet (Baer, Smith, & Allen, 2004; Fernandez et al., 2010) and self-monitoring (Maas et al., 2013). Implicit alcohol associations (Ostafin

et al., 2008) and relationships between mindfulness, acting with awareness, attentional biases and alcohol misuse (Garland et al., 2012) are evident. In conjunction with the current study's results, such research indicates the utility of interventions that focus on raising one's awareness so that drinking is a conscious decision rather than an assumed or automatic behaviour.

9.6.2.2 Self-identity

Self-identity was significantly associated with women's intentions to engage in binge drinking. Although the TPB would predict that intentions are the direct predictor of behaviour and the key TPB constructs and extensions are associated with intentions, Unexpectedly, alongside intentions, self-identity was also a significant predictor of actual engagement in binge drinking, but not frequent drinking (see Section 9.6.4 Behaviour for further discussion). Such results are consistent with previous research demonstrating the importance of self-identifying as a drinker on intentions to drink alcohol (Conner et al., 1999). However, the absence of women self-identifying as a drinker in the face of possibly consuming alcohol on six or more days per week is noteworthy. Is the assumption that a woman only classifies herself as a drinker if she binge drinks, regardless of how often she drinks? How do women characterize a drinker? Study 2 (the interviews) found that women varied in their definitions of what it is to be a "drinker". Hence, these results raise the question as to what criteria are being used in such a self-assessment. A related concept to self-identity is that of prototypical identity and prototype similarity (Mannetti, Pierro, & Livi, 2004; Walsh & White, 2007). For instance, an individual would need to evaluate the prototype or images associated with being a drinker and find similarities with such a prototype before identifying with that behaviour (i.e., self-identifying as a drinker). Further examination of possible relationships between self-identity, prototype similarity and intentions to engage in frequent drinking is warranted. When considering interventions to reduce risky drinking behaviours, such as binge drinking, it is important to be aware of the need to target an individual's self-identity as a drinker and the underlying expectations and behaviours associated with that identity.

9.6.3 Influence of sociodemographic variables

Previous research findings (O'Hara et al., 2008), have supported Ajzen's (1991) assertion that TPB constructs directly relate to intentions and therefore sociodemographics should be subsumed by the TPB constructs. However, in the current research, age was inversely related to intentions to binge drink and positively correlated with intentions to frequent drink over and above the TPB constructs. Additionally, age was found to be a significant predictor of engagement in frequent drinking. These findings reflect emerging patterns of women's drinking behaviours, wherein younger women are more likely to have intentions to binge drink (Lindsay, 2006; Livingston et al., 2012) and older women have more intentions to engage in frequent drinking (Midanik & Room, 1992). With attention dedicated to understanding younger women's drinking behaviours, the current findings justify the need for further examination of women's drinking to also include older women.

9.6.4 Behaviour

Overall, the current study's results provide support for the predictive utility of the TPB in regards to explaining women's drinking behaviours. Stage 2 results showed that intentions were consistently associated with behaviour, but PBC failed to reach significance after all variables were entered. Although other studies have found that a significant proportion of the variance in drinking behaviours may be explained by the TPB standard constructs (Kim & Hong, 2013), mixed results have been observed where PBC is a comparatively weaker predictor of drinking behaviour (Hagger et al., 2012). It is therefore important to consider intention to drink in such ways as a driver of these behaviours. Although the TPB (Ajzen, 1991) would predict that intentions and PBC are the direct predictors of behaviour, in the current study, self-identity also emerged as a direct predictor of engagement in binge drinking. This result indicates that self-identity may contribute some additional understanding of this specific behaviour and account for some of the variance not accounted for by intentions. In contrast, for frequent drinking, self-identity was not a significant predictor.

9.7 Strengths and limitations

The present study provides a greater understanding of the underlying predictors of women's risky alcohol consumption. The inclusion of women of a range of ages in this study has improved the evaluation of salient factors influencing women's drinking behaviour (ABS, 2012a; AIHW, 2008; Measham & Ostergaard, 2009). Thus, this study contributes to an emerging body of knowledge in this area, providing information which may potentially inform future interventions and public policy. The investigation of the predictive utility of an extended TPB model on two specific risk-related drinking behaviours has contributed to research evidence on the applicability of the TPB in understanding factors which influence such behaviours. Measurement of self-reported behaviour facilitated analysis of the relationship between women's intentions to drink in certain ways and self-reported engagement in such behaviours. The current study also contributed to knowledge regarding the role of self-identity and alcohol consumption, as well as adding to the literature regarding the automatic processes (i.e., awareness) underlying drinking behaviours.

Despite the study's strengths, there are some limitations which should be acknowledged. In particular, there was a reliance upon self-report measures and the sample, although large ($N = 1069$), was based on convenience sampling. The use of self-report surveys introduces bias and the possibility that the participants may have under-reported their drinking, and modified their responses to represent what they believed to be socially desirable responses. Additionally, the self-report in the follow-up questionnaire relied upon accurate recall of participant drinking within the previous two weeks. However, the two week time period was chosen with the intention that accuracy would not be diminished as much as a longer interval between the main questionnaire and the follow-up questionnaire. Another limitation was the attrition rate from the main questionnaire to the follow up. However, as previously discussed no significant differences were found between the two samples and so the results may be considered reliable. Finally, although the self-identity items were guided by previous research (Rise et al., 2010; Sparks & Shepherd, 1992) and were intended to relate to

drinking in general, the direct questioning of “I think of myself as a frequent drinker” and “I think of myself as a binge drinker” may have added further insight.

9.8 Future research

This study contributes to an emerging body of knowledge in this area informing future interventions. Overall, in contrast to binge drinking, frequent drinking appeared to have little relationship to whether one identified as a drinker or not. Although women, particularly older women, are engaging in frequent drinking and therefore increasing their exposure to risk, there needs to be further exploration of this behaviour, its underlying psychosocial predictors and the potential for associated harms. The current study addressed this need specifically with regard to the utility of an extended TPB (Ajzen, 1991), but further information is needed, for example, with regard to how awareness (or lack of) of long term risks through frequent drinking affects individuals’ attitudes and drinking behaviours. The current study also raised questions regarding the role of self-identity with regards to frequent alcohol consumption. Investigation into the role of self-identity and prototype evaluation could increase understanding of how women perceive themselves and others who engage in frequent drinking. Finally, although the current study examined awareness of one’s own drinking in regard to frequent and binge drinking, further research is needed on women’s awareness when drinking. For instance how awareness may influence occasions of incidental drunkenness, and how it may be used as a potential intervention to help reduce incidental drunkenness. Interventions, such as mindfulness and self-monitoring, conceptually contrast with implicit drinking behaviours and may have the potential to reduce alcohol-related harms for women. Increased awareness could reduce impulsive behavioural tendencies aligned with implicit drinking (Fernandez et al., 2010).

9.9 Conclusion

The aim of the current study was to further our understanding of women’s alcohol consumption, and examine the predictive utility of the extended TPB in regards to intentions to, and engagement in two drinking behaviours (frequent drinking and binge drinking). Using an extended TPB framework, this study provides support for the predictive utility of the standard TPB constructs

on women's intentions to engage in frequent drinking and binge drinking. This current study also provides support for the inclusion of awareness and self-identity as additional determinants of intentions to binge drink. Drawing conclusions with regard to the importance of subjective norms and self-awareness, interventions raising women's awareness regarding their drinking behaviours and habits could help women to see their drinking as a choice rather than an expectation and therefore, in turn, possibly lessen the impact of social expectations to drink. Additionally, increasing women's awareness may also assist women in correcting any misperceptions they may have with regard to their peer's expectations and behaviours. Misperceptions with regard to alcohol-related social norms have been found to be common amongst young people and using normative feedback to help rectify these misperceptions has been shown to be effective in reducing alcohol consumption (Lewis & Neighbors, 2006).

Further, key influencing factors identified in this study have been highlighted as important in influencing women's intentions to engage in risky drinking behaviours (i.e. frequent and/or binge drinking). These factors represent potentially important foci for prevention or intervention strategies, a suggestion which is evident in conclusions emerging from existing literature. That is, aligning with the current study's findings, identity has been shown to play an important role in addictive behaviours (Lindgren et al., 2012; Young, 2011) and may be underpinned by the relationships between self-identity, social identity and normative influence (Fekadu & Kraft, 2001; Terry et al., 1999).

Support is also found for the predictive utility of intentions to drink, as well as age (as a direct predictor of frequent drinking) and self-identity (as a direct predictor of binge drinking). The increase in women's alcohol consumption and associated harms has warranted this investigation. This study has increased our understanding of processes involved in women's decisions to drink frequently and/or binge drink. These results have identified key factors which influence women's decisions to engage in risky alcohol consumption behaviours. Such insight is important to the extent that understanding the contributing factors may assist to inform future targeted interventions.

Chapter 10 – The Critical Beliefs Analysis

10.1 Aims

Drawing on the TPB as a useful framework for informing the development of interventions, the overall aim of the critical beliefs analysis was to examine the strength of the relationships between the critical beliefs (i.e., behavioural beliefs, normative beliefs and control beliefs) in regards to the three different drinking behaviours (i.e., low risk drinking, frequent drinking and binge drinking). The research sub-questions were: 1. To what extent do normative beliefs, behavioural beliefs and control beliefs predict women's intentions to low risk drink, frequent drink and binge drink?; 2. Which of the significant predictors of intentions to engage in drinking behaviours were also predictive of actual (self-reported) drinking behaviours?; and 3. Are there differences in the salient beliefs which predict women's drinking across age cohorts?

10.2 Methods

10.2.1 Participants

Women ($N = 1069$) residing in Australia and aged between 18 and 87 years ($M = 35$, $SD = 13.7$) completed the main questionnaire. To examine potential differences across age groups in the underlying beliefs regarding drinking, the responses were grouped according to the following ages: 18 to 24 years (30.6%); 25 to 34 years (25.8%); 35 to 44 years (20.5%); 45 to 54 years (13.8%); and 55 years and above (9.3%). This age group categorization is consistent with the fluctuating drinking trends (ABS, 2009b, 2012a). For further details on recruitment and sociodemographics please see Chapter 8, which outlines the methods of Study 3 (the survey) in detail.

10.2.2 Design and procedure

The critical beliefs examined in the current analysis were based on the findings from the earlier, qualitative phase of this programme of research. The current analysis utilized these identified general beliefs about alcohol consumption to explore the association between these beliefs and intentions to engage in low risk drinking, frequent drinking, or binge drinking. The prospective design survey also allowed assessment of which beliefs were direct determinants of actual self-reported drinking behaviours. Hence, as a final step, the beliefs that showed significant relationships with intentions were also regressed on actual drinking behaviours.

10.2.3 Measures

As discussed in Chapter 8, questions assessing intentions to drink, and the associated underlying critical beliefs, were based on the standard TPB self-report format (Ajzen, 2002; Fishbein & Ajzen, 2010). The beliefs, including normative, behavioural and control beliefs (Ajzen, 1991), were measured in the main questionnaire. The dependent variables in the critical beliefs analysis were low risk drinking, frequent drinking and binge drinking. For further details on the operationalization of these variables, please see Chapter 8, which outlines the methods of Study 3 in detail.

10.2.4 Analysis

A three step critical beliefs analysis was undertaken as guided by von Haeften, Fishbein, Kasprzyk and Montano (2001). Firstly, the Pearson correlation matrices were examined to identify beliefs that were significantly correlated with the intentions to low risk drink, frequent drink and binge drink (see Tables 19, 21 & 23). Secondly, the significant beliefs from the Pearson correlation matrices were entered according to belief type (i.e., behavioural, normative and control) into stepwise regressions see (Tables 20, 22 & 24). These regressions allowed

identification of the critical beliefs that independently contributed to intentions to drink (low risk, frequent and binge). Finally, all of the significant beliefs from the stepwise analyses were put into three (one for each behaviour) final multiple regressions to assess the significant contributors to intentions. A final analysis then assessed which of the beliefs that had emerged as significant predictors of intentions were also associated with actual drinking behaviour. Significance levels were adjusted to $p < .01$ for the first two steps, rather than $p < .001$, because, although multiple analyses can result in an inflated Type 1 error rate (Tabachnick & Fidell, 2001), the exclusion of variables in each of the three steps (von Haeften et al., 2001) was deemed conservative enough to maintain an appropriate balance between Type 1 and Type 2 errors. After exclusion of a number of variables, $p < .05$ was the significance level used in the final third step. As discussed previously, assumptions for the analyses were met. Checks for multicollinearity (as checked through coefficient output and tolerance values) were undertaken and met, and outliers were removed.

10.3 Results

10.3.1 Comparing age groups within intentions to low risk drink, frequent drink and binge drink – The ANOVA analyses

A 5 x 3 split plot ANOVA was conducted to examine the differences between the age groups' intentions to engage in the three different drinking behaviours of low risk, frequent drinking and binge drinking. Age was operationalised by dividing participants into the age groups: 18 to 24 years ($n = 324$); 25 to 34 years ($n = 278$); 35 to 44 years ($n = 217$); 45 to 54 years ($n = 150$); and 55 years and above ($n = 100$). Multivariate results revealed a significant interaction between age and intention to drink, Wilks' $\Lambda = .80$, $F(8, 2100) = 30.57$, $p < .001$, partial $\eta^2 = .10$.

The univariate analyses of the simple effects of age on each of the (intentions to) drinking behaviours (See Table 18) showed no significant effect of age on intentions to low risk drink, but significant effects of age on intentions to frequent and binge drink. Examination of the post hoc pairwise tests with an adjusted alpha level of .025, to control for familywise Type 1 error, revealed that older women (45-54 and 55 years and above), were more likely to intend to frequent drink compared with all younger counterparts. Comparing between age groups on binge drinking, 18 to 24 year olds were more likely to intend to binge drink compared with all of the other age groups. Each age group progressively, from youngest to oldest, was less likely to binge drink as they got older, with the exception of women aged 35 to 44 years and 45 to 54 years where there was no significant difference. These analyses indicate the particular risky behaviours that were most relevant to each age group.

10.3.2 Critical beliefs underpinning intentions – The regression analyses

The significant bivariate correlations between the critical beliefs and intentions to low risk drink (Table 19), frequent drink (Table 21) and binge drink (Table 22) are shown below. The results of the stepwise regression analyses on the significant beliefs, which display the significant predictors of intention to low risk drink (Table 20), frequent drink (Table 22) and binge drink (Table 24) for each age group are presented below. The results from the final multiple regression analyses which revealed the significant critical beliefs predicting intentions are presented and discussed below.

Table 18

Comparison between Age Groups on Intentions to Low Risk, Frequent and Binge Drink

| | 18 to 24 years <i>M (SD)</i> | 25 to 34 years <i>M (SD)</i> | 35 to 44 years <i>M (SD)</i> | 45 to 54 years <i>M (SD)</i> | 55 years and above <i>M (SD)</i> | <i>F</i> | Sig. | partial η^2 |
|----------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------------------------------------|----------|-------|---------------------|
| Low risk | 4.83 (1.51) | 4.93 (1.41) | 4.62 (1.56) | 4.69 (1.51) | 4.87 (1.44) | 1.61 | .169 | .006 |
| Frequent | 1.73 (0.95) | 1.81 (1.06) | 2.10 (1.20) | 2.54 (1.56) | 2.40 (1.40) | 16.86 | <.001 | .060 |
| Binge | 3.95 (1.16) | 3.65 (1.14) | 3.29 (1.15) | 3.14 (0.99) | 2.70 (0.82) | 33.10 | <.001 | .112 |

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Table 19

Step 1 of Haefton et al., Critical Beliefs Analysis - Bivariate Correlations of Beliefs with Intentions to Low Risk Drink across Age Groups

| Beliefs | Pearsons correlation (r) for each age group | | | | |
|-----------------------------------|---|----------|----------|----------|---------|
| | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Make me appear to be a fun person | .320** | .091 | .153* | .033 | .097 |
| Help me to have fun | .374** | .270** | .256** | .156 | .214* |
| Help me to socialise with others | .343** | .256** | .209** | .213** | .164 |
| Make me feel relaxed | .383** | .320** | .426** | .437** | .192 |
| Help me to unwind | .419** | .322** | .378** | .379** | .208* |
| Make me less boring | .246** | .151* | .162* | -.004 | .042 |
| Help me to find a partner | .213** | -.006 | .046 | -.139 | .147 |
| Help me to talk with others | .253** | .106 | .174* | .067 | .190 |
| Costs | | | | | |
| Make me sick in the short term | -.010 | -.142* | -.215** | -.348** | -.267** |
| Cause ill-health in the long term | -.130* | -.170** | -.214** | -.226** | -.199 |
| Stop me from meeting people | .076 | -.083 | -.025 | -.039 | .061 |
| Cost more than I can afford | -.049 | -.158** | -.213** | -.110 | -.134 |

| | | | | | |
|--|---------|---------|---------|--------|---------|
| Interfere with my existing commitments | -.179** | -.215** | -.305** | -.127 | -.257* |
| Interfere with my family life | -.134* | -.299** | -.333** | -.166* | -.316** |
| Make me feel irresponsible | -.069 | -.179** | -.159* | -.114 | -.190 |
| Make me lose control | -.070 | -.149* | -.184** | -.190* | -.174 |
| Normative beliefs | | | | | |
| Spouse/ partner | .125* | .154* | .144* | -.033 | .246** |
| Family | .150** | -.001 | .007 | -.072 | .152 |
| Friends | .126* | .196** | .113 | -.074 | .145 |
| Professional/ Work colleagues | .074 | .069 | -.036 | -.102 | .001 |
| Having concerned family members or friends | -.182** | -.048 | -.033 | .073 | -.107 |
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having health issues | -.104 | .016 | -.099 | .154 | .048 |
| Having family commitments that I must keep | -.091 | -.083 | .074 | .068 | .093 |
| Having non family commitments I must keep | -.106 | -.100 | .120 | .089 | .134 |
| Having to drive | .013 | -.015 | .206** | .193* | .049 |
| Being pregnant or breastfeeding | .071 | .080 | .027 | .088 | -.009 |
| Short term side effects of alcohol (hangovers) | -.276** | -.224** | -.092 | .036 | -.114 |
| Not able to control my behaviour when I drink | -.249** | -.120* | .079 | .209* | -.051 |

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| | | | | | |
|--|---------|--------|---------|---------|--------|
| Being uncomfortable (e.g., feelings, in an environment) | -.255** | -.005 | -.006 | .059 | .021 |
| Being at risk from others | -.150** | .005 | .105 | .146 | .036 |
| Beliefs or values (e.g., health, sport or religious) not aligned with drinking | -.243** | -.076 | -.077 | .010 | .002 |
| Being a mother | -.092 | -.100 | -.186** | -.224** | -.088 |
| Having to travel too far to buy alcohol. | .030 | .013 | -.006 | .052 | .138 |
| Facilitators | | | | | |
| If drinking venues were in walking distance | .371** | .326** | .257** | .019 | .324** |
| If I have had a really stressful week. | .461** | .362** | .403** | .364** | .370** |
| If my tolerance for alcohol meant that I didn't "suffer" from ill effects the next day | .451** | .177** | .272** | .116 | .383** |
| If it is Christmas /New Year (Cultural Celebration). | .563** | .400** | .426** | .421** | .403** |
| If alcohol was more affordable | .483** | .213** | .191** | .027 | .353** |
| If I am on holidays | .638** | .366** | .512** | .415** | .385** |
| If I didn't have to get up so early in the mornings | .430** | .206** | .204** | .145 | .236* |
| If I was single and looking for a partner | .377** | .197** | .252** | .029 | .170 |
| If it was Melbourne Cup Day or another important sporting event | .365** | .334** | .237** | .125 | .331** |

| | | | | | |
|--|--------|--------|--------|--------|--------|
| If I didn't have children | .392** | .224** | .212** | .086 | .300** |
| If I was at a nice restaurant | .461** | .421** | .395** | .422** | .385** |
| If I was close to wineries or wine clubs | .319** | .209** | .225** | .166* | .475** |
| If it was my birthday. | .591** | .449** | .436** | .410** | .391** |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

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Table 20

Step 2 of Haefton's Critical Beliefs Analysis – Stepwise Regression results Identifying Critical-Belief based Predictors of Intention to Low Risk Drink

| | β | | | | |
|---|----------|----------|----------|----------|---------|
| Beliefs predicting intentions to low risk drink | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Help me to have fun | .20** | | | | |
| Make me feel relaxed | | | .43*** | .44*** | |
| Help me to unwind | .31*** | .33*** | | | .21* |
| Costs | | | | | |
| Make me sick in the short term | | | | -.36*** | |
| Interfere with my existing commitments | -.18** | | | | |
| Interfere with my family life | | -.30*** | -.34** | | -.32** |
| Normative beliefs | | | | | |
| Spouse/ partner | | | .14* | | .25* |
| Family | .15** | | | | |
| Friends | | .20** | | | |
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having to drive | | | .23** | | |
| Being pregnant or breastfeeding | | | | | |

| | | | | |
|--|--------|---------|--------|---------|
| Short term side effects of alcohol (hangovers) | -.18** | -.22*** | | |
| Not able to control my behaviour when I drink | | | | .30*** |
| Being uncomfortable (e.g., feelings, in an environment) | -.14* | | | |
| Beliefs or values (e.g., health, sport or religious) not aligned with drinking | -.13* | | | |
| Being a mother | | | -.22** | -.31*** |
| Facilitators | | | | |
| If I have had a really stressful week. | | .14* | .17** | .22** |
| If it is Christmas time or New Year (Cultural Celebration). | | | | .35*** |
| If I am on holidays | .37*** | | .42*** | .25** |
| If I was at a nice restaurant | .15** | .24*** | | |
| If I was close to wineries or wine clubs | | | | .40*** |
| If it was my birthday. | .26*** | .26*** | | |

*** $p < .001$ ** $p < .01$ * $p < .05$

Women's Drinking

Table 21

Step 1 of Haefton et al., Critical Beliefs Analysis - Bivariate Correlations of Beliefs with Intentions to Frequent Drink across Age Groups

| | Pearsons correlation (r) for each age group | | | | |
|-----------------------------------|---|----------|----------|----------|---------|
| Beliefs | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Make me appear to be a fun person | .017 | .010 | .089 | -.079 | .138 |
| Help me to have fun | -.010 | .146* | .173* | -.020 | .047 |
| Help me to socialise with others | .000 | .118* | .116 | .052 | .064 |
| Make me feel relaxed | .007 | .170** | .228** | .253** | .085 |
| Help me to unwind | .067 | .244** | .181** | .224** | .068 |
| Make me less boring | -.004 | .012 | .099 | -.026 | .107 |
| Help me to find a partner | .094 | .047 | .115 | .067 | -.027 |
| Help me to talk with others | .022 | .118 | .109 | .048 | .047 |
| Costs | | | | | |
| Make me sick in the short term | -.037 | -.115 | -.001 | -.132 | -.040 |
| Cause ill-health in the long term | .040 | .010 | .108 | .077 | .105 |
| Stop me from meeting people | .128* | .036 | .046 | .061 | .053 |
| Cost more than I can afford | .165** | -.027 | .023 | -.089 | .085 |

| | | | | | |
|--|---------|---------|---------|---------|---------|
| Interfere with my existing commitments | .084 | .018 | .071 | -.073 | -.055 |
| Interfere with my family life | .075 | .098 | .068 | .002 | .009 |
| Make me feel irresponsible | .030 | .002 | -.031 | -.118 | .075 |
| Make me lose control | -.019 | .026 | .059 | -.116 | -.031 |
| Normative beliefs | | | | | |
| Spouse/ partner | .020 | .110 | .033 | .113 | .069 |
| Family | .114* | .021 | .118 | -.001 | .176 |
| Friends | -.033 | .055 | .041 | .008 | .216* |
| Professional/ Work colleagues | .101 | .006 | .004 | .069 | -.012 |
| Having concerned family members or friends | -.181** | -.319** | -.184** | -.263** | -.193 |
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having health issues | -.200** | -.165** | -.131 | -.271** | -.126 |
| Having family commitments that I must keep | -.217** | -.107 | -.102 | -.230** | -.299** |
| Having non family commitments I must keep | -.139* | -.169** | -.167* | -.228** | -.249* |
| Having to drive | -.245** | -.091 | .007 | .019 | -.078 |
| Being pregnant or breastfeeding | -.174** | -.200** | -.208** | .001 | -.049 |
| Short term side effects of alcohol (hangovers) | -.039 | -.115 | -.182** | -.107 | -.072 |
| Not able to control my behaviour when I drink | -.092 | -.110 | -.072 | -.001 | .029 |

Women's Drinking

| | | | | | |
|--|--------|---------|--------|--------|--------|
| Being uncomfortable (e.g., feelings, in an environment) | -.123* | -.246** | -.051 | -.027 | -.127 |
| Being at risk from others | -.051 | -.157** | -.002 | .015 | -.019 |
| Beliefs or values (e.g., health, sport or religious) not aligned with drinking | -.127* | -.106 | -.080 | -.160 | .006 |
| Being a mother | -.070 | -.194** | -.073 | -.097 | -.048 |
| Having to travel too far to buy alcohol. | -.050 | -.074 | .028 | -.027 | -.010 |
| Facilitators | | | | | |
| If drinking venues were in walking distance | .144** | .083 | .159* | .066 | .065 |
| If I have had a really stressful week. | .206** | .163** | .235** | .267** | .269** |
| If my tolerance for alcohol meant that I didn't "suffer" from ill effects the next day | .119* | .091 | .218** | .066 | .159 |
| If it is Christmas /New Year (Cultural Celebration). | .130* | .080 | .163* | .013 | .157 |
| If alcohol was more affordable | .148** | .150* | .216** | .165* | .142 |
| If I am on holidays | .109 | .015 | .174* | .040 | .092 |
| If I didn't have to get up so early in the mornings | .113* | .196** | .194** | .074 | .141 |
| If I was single and looking for a partner | .091 | .052 | .109 | .087 | .023 |
| If it was Melbourne Cup Day or another important sporting event | .115* | .081 | .197** | .042 | .264** |

| | | | | | |
|--|--------|-------|--------|------|-------|
| If I didn't have children | .112* | .133* | .106 | .153 | .254* |
| If I was at a nice restaurant | .185** | .048 | .177* | .050 | .149 |
| If I was close to wineries or wine clubs | .201** | .120* | .178** | .059 | -.086 |
| If it was my birthday. | .060 | .125* | .166* | .009 | .151 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Women's Drinking

Table 22

Step 2 of Haefton's Critical Beliefs Analysis – Stepwise Regression results Identifying Critical-Belief based Predictors of Intention to Frequent Drink

| Beliefs predicting intentions to frequent drink | β | | | | |
|---|----------|----------|----------|----------|---------|
| | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Make me feel relaxed | | | .23** | .25** | |
| Help me to unwind | | .24*** | | | |
| Costs | | | | | |
| Cost more than I can afford | .17** | | | | |
| Normative beliefs | | | | | |
| Family | .11* | | | | |
| Friends | | | | | .22* |
| Having concerned family members or friends | | -.22** | | | |
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having health issues | -.13* | | | -.32*** | |
| Having family commitments that I must keep | | | | | -.32* |
| Having to drive | -.20*** | | | | |
| Being pregnant or breastfeeding | | -.13* | -.19** | | |
| Short term side effects of alcohol (hangovers) | | | -.16* | | |
| Being uncomfortable (e.g., feelings, in an | | | | | |

| | | | | |
|---|-------|-------|-------|-------|
| environment) | -.13* | | | |
| Facilitators | | | | |
| If I have had a really stressful week. | .13* | .16** | .27** | .27** |
| If alcohol was more affordable | | .15* | | |
| If I didn't have to get up so early in the mornings | | .20** | | |
| If I was close to wineries or wine clubs | .14* | | | |

*** $p < .001$ ** $p < .01$ * $p < .05$

Women's Drinking

Table 23

Step 1 of Haefton et al., Critical Beliefs Analysis - Bivariate Correlations of Beliefs with Intentions to Binge Drink across Age Groups

| | Pearsons correlation (r) for each age group | | | | |
|-----------------------------------|---|----------|----------|----------|---------|
| Beliefs | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Make me appear to be a fun person | .372** | .385** | .195** | .018 | .260** |
| Help me to have fun | .441** | .430** | .336** | .254** | .244* |
| Help me to socialise with others | .408** | .338** | .289** | .219** | .226* |
| Make me feel relaxed | .379** | .270** | .315** | .365** | .073 |
| Help me to unwind | .416** | .325** | .339** | .303** | .174 |
| Make me less boring | .321** | .373** | .202** | .132 | .109 |
| Help me to find a partner | .275** | .303** | .262** | .183* | .103 |
| Help me to talk with others | .326** | .272** | .172* | .258** | .133 |
| Costs | | | | | |
| Make me sick in the short term | .084 | .097 | .032 | -.002 | .036 |
| Cause ill-health in the long term | -.106 | .110 | .015 | .037 | .178 |
| Stop me from meeting people | -.028 | .108 | -.002 | .171* | .180 |
| Cost more than I can afford | -.047 | .090 | -.009 | -.110 | .064 |

| | | | | | |
|--|---------|---------|---------|---------|--------|
| Interfere with my existing commitments | -.065 | .141* | -.043 | -.047 | .066 |
| Interfere with my family life | -.129* | -.012 | -.080 | -.001 | .203* |
| Make me feel irresponsible | -.031 | .098 | .032 | .030 | .258* |
| Make me lose control | .142* | .183** | .114 | .039 | .241* |
| Normative beliefs | | | | | |
| Spouse/ partner | .115* | .305** | .194** | .138 | -.023 |
| Family | .125* | .109 | .072 | .026 | .111 |
| Friends | .255** | .254** | .179** | .061 | .092 |
| Professional/ Work colleagues | .061 | .083 | .046 | .003 | .008 |
| Having concerned family members or friends | -.243** | -.240** | -.187** | -.328** | -.100 |
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having health issues | -.211** | -.119* | -.222** | -.239** | -.117 |
| Having family commitments that I must keep | -.175** | -.147* | .010 | -.227** | -.145 |
| Having non family commitments I must keep | -.209** | -.212** | -.023 | -.230** | -.246* |
| Having to drive | -.080 | -.004 | .031 | -.221** | -.076 |
| Being pregnant or breastfeeding | .021 | .130* | .028 | -.262** | -.154 |
| Short term side effects of alcohol (hangovers) | -.524** | -.416** | -.303** | -.412** | -.252* |
| Not able to control my behaviour when I drink | -.421** | -.256** | -.178** | -.248** | -.169 |

Women's Drinking

| | | | | | |
|--|---------|---------|---------|---------|-------|
| Being uncomfortable (e.g., feelings, in an environment) | -.443** | -.226** | -.147* | -.330** | -.200 |
| Being at risk from others | -.288** | -.096 | -.052 | -.264** | -.103 |
| Beliefs or values (e.g., health, sport or religious) not aligned with drinking | -.250** | -.226** | -.184** | -.389** | -.028 |
| Being a mother | -.061 | .008 | -.175* | -.231** | .024 |
| Having to travel too far to buy alcohol. | -.016 | -.015 | -.121 | -.179* | -.013 |
| Facilitators | | | | | |
| If drinking venues were in walking distance | .419** | .361** | .347** | .268** | -.095 |
| If I have had a really stressful week. | .434** | .289** | .304** | .282** | .232* |
| If my tolerance for alcohol meant that I didn't "suffer" from ill effects the next day | .536** | .362** | .285** | .215** | .229* |
| If it is Christmas time or New Year (Cultural Celebration). | .481** | .288** | .359** | .165* | .124 |
| If alcohol was more affordable | .522** | .349** | .313** | .167* | .099 |
| If I am on holidays | .486** | .318** | .423** | .260** | .055 |
| If I didn't have to get up so early in the mornings | .488** | .353** | .315** | .228** | .107 |
| If I was single and looking for a partner | .442** | .335** | .301** | .141 | .132 |
| If it was Melbourne Cup Day or another important | | | | | |

| | | | | | |
|--|--------|--------|--------|-------|-------|
| sporting event | .403** | .421** | .450** | .142 | .225* |
| If I didn't have children | .523** | .260** | .196** | .165* | .152 |
| If I was at a nice restaurant | .257** | .191** | .235** | .086 | .059 |
| If I was close to wineries or wine clubs | .206** | .205** | .203** | .100 | -.073 |
| If it was my birthday. | .566** | .405** | .392** | .183* | .148 |

*** $p < .001$ ** $p < .01$ * $p < .05$

Table 24

Step 2 of Haefton's Critical Beliefs Analysis – Stepwise Regression results Identifying Critical-Belief based Predictors of Intention to Binge Drink.

| | β | | | | |
|--|----------|----------|----------|----------|---------|
| Beliefs predicting intentions to binge drink | 18 to 24 | 25 to 34 | 35 to 44 | 45 to 54 | 55 Plus |
| Behavioural beliefs | | | | | |
| Benefits | | | | | |
| Make me appear to be a fun person | | | | | .26* |
| Help me to have fun | .21** | .36*** | | | |
| Help me to socialise with others | .16* | | | | |
| Make me feel relaxed | | | | .36*** | |
| Help me to unwind | .22** | | .21** | | |
| Help me to find a partner | | .20** | .14* | .17* | |
| Costs | | | | | |
| Stop me from meeting people | | | | .17* | |
| Interfere with my family life | -.18** | | | | |
| Make me feel irresponsible | | | | | .26* |
| Make me lose control | .19** | .18** | | | |
| Normative beliefs | | | | | |
| Spouse/ partner | | .24*** | .19** | | |
| Friends | .26*** | .16* | | | |
| Having concerned family members or friends | | | | -.17* | |

| | | | | | |
|--|---------|----------|---------|--------|--------|
| Control beliefs | | | | | |
| Barriers | | | | | |
| Having health issues | | | | | -.15* |
| Having non family commitments I must keep | | -.19** | | | |
| Being pregnant or breastfeeding | | .26*** | | | |
| Short term side effects of alcohol (hangovers) | -.42*** | -.387*** | -.26*** | -.24** | -.25* |
| Being uncomfortable (e.g., feelings, in an environment) | -.29*** | | | | |
| Beliefs or values (e.g., health, sport or religious) not aligned with drinking | | | | | -.25** |
| Having to travel too far to buy alcohol. | | | | | |
| Facilitators | | | | | |
| If drinking venues were in walking distance | | | | .18* | |
| If I have had a really stressful week. | | | | .21* | .23* |
| If my tolerance for alcohol meant that I didn't "suffer" from ill effects the next day | .18** | .17** | | | |
| If alcohol was more affordable | .18** | .15* | | | |
| If I am on holidays | | | .26*** | | |
| If I was single and looking for a partner | .12* | | | | |
| If it was Melbourne Cup Day or another important sporting event | | .24*** | .32*** | | |
| If I didn't have children | .21*** | | | | |
| If I was close to wineries or wine clubs | -.16** | | | | |
| If it was my birthday. | .26*** | .17** | | | |

*** $p < .001$ ** $p < .01$ * $p < .05$

10.3.3 Critical beliefs underpinning intentions to, and engagement in drinking behaviours

Overall, the majority of beliefs which were found to be significantly predictive of intentions to drink alcohol were often also significantly associated with actual drinking behaviour. See Tables 25 to 27 for the results of the regression analyses.

10.3.3.1 Intentions to, and engagement in low risk drinking

The critical beliefs that significantly predicted intentions to low risk drink and actual engagement in low risk drinking across age groups are presented in Table 25. For each of the age groups varying control beliefs and behavioural beliefs significantly predicted intentions to and engagement in, low risk drinking. Normative beliefs were only significant for the 55 year old and above women, wherein spouses facilitated intentions to low risk drink.

10.3.3.2 Intentions to, and engagement in frequent drinking

The critical beliefs that significantly predicted intentions to frequent drink and actual engagement in frequent drinking across age groups are presented in Table 26. For the 18 to 24 year old women, engagement to drink frequently was predicted by control beliefs of having a stressful week, but countered by having to drive (control belief, barrier). Control beliefs of having a stressful week and behavioural beliefs of making me feel relaxed and helping me to unwind continued to predict engagement in frequent drinking. Specifically, such significant predictors of engagement in frequent drinking were: 18 to 24 year olds' control beliefs of having a stressful week; 25 to 34 year olds' underlying behavioural belief of help me to unwind; 45 to 54 year olds' behavioural belief of make me feel relaxed; and 55 years and above's control belief of having a stressful week. Control beliefs in the age groups 25 to 34 and 35 to 44, focussed on being pregnant or breastfeeding as a barrier to frequent drinking.

10.3.3.3 Intentions to, and engagement in binge drinking

The critical beliefs that significantly predicted intentions to binge drink and actual engagement in binge drinking across age groups are presented in Table 27. Barriers and facilitators (control beliefs) were the main significant predictors found in relation to intentions to, and engagement in binge drinking. The control belief, short term side effects of alcohol (hangover) was a significant barrier to intentions to, and engagement in binge drinking for most age groups. Analyses could not be conducted for women's aged 55 years and above, engagement in binge drinking as only 10 women in the cohort reported engagement in binge drinking.

Table 25

Women's Critical Beliefs that Significantly Predict Intentions to Low Risk Drink and Amount Drunk across Age Groups

| Age | Women's beliefs | <i>Intentions</i> | | | <i>Behaviour</i> | | |
|-------|--|-------------------|---------|------------|------------------|---------|------------|
| | | B | β | <i>Sig</i> | B | β | <i>sig</i> |
| 18-24 | Control Beliefs | | | | | | |
| | Values (e.g. religious, health, sport) | -.08 | -.10 | .038 | -.18 | -.11 | .065 |
| | If I am on holidays | .34 | .33 | <.001 | .08 | .04 | .622 |
| | If I am at a nice restaurant | .13 | .14 | .005 | .00 | .00 | .975 |
| | If it is my birthday | .25 | .24 | <.001 | .69 | .34 | <.001 |
| 25-34 | Behavioural Beliefs | | | | | | |
| | Interferes with my family life | -.20 | .23 | <.001 | .06 | .05 | .511 |
| | Control Beliefs | | | | | | |
| | If I am at a nice restaurant | .22 | .24 | <.001 | .03 | .02 | .756 |
| | If it is my birthday | .19 | .20 | .002 | .29 | .20 | .009 |
| 35-44 | Behavioural Beliefs | | | | | | |
| | Make me feel relaxed | .17 | .15 | .038 | .08 | .06 | .462 |
| | Interfere with my family life | -.23 | -.26 | <.001 | .07 | .07 | .321 |

| | | | | | | | |
|------------------|---|------|------|-------|------|------|-------|
| Control Beliefs | | | | | | | |
| | Stressful week | .13 | .16 | .027 | .22 | .26 | .003 |
| | If I am on holidays | .24 | .23 | .003 | .33 | .29 | .001 |
| 45-54 | Behavioural Beliefs | | | | | | |
| | Make me feel relaxed | .31 | .28 | .001 | .45 | .38 | <.001 |
| | Make me sick in the short term | -.16 | -.21 | .004 | .10 | .11 | .218 |
| Control Beliefs | | | | | | | |
| | Not able to control my behaviour | .29 | .28 | <.001 | .07 | .06 | .542 |
| | Being a mother | -.16 | -.18 | .014 | -.17 | -.17 | .081 |
| | If it is Christmas or New Year (Cultural celebration) | .18 | .19 | .019 | -.05 | -.04 | .672 |
| 55 and above | Behavioural Beliefs | | | | | | |
| | Interfere with my family life | -.16 | -.21 | .014 | -.09 | -.09 | .399 |
| Normative Belief | | | | | | | |
| | Spouse/ partner | .12 | .24 | .005 | -.05 | -.08 | .464 |
| Control Beliefs | | | | | | | |
| | If I am on holidays | .23 | .30 | <.001 | .38 | .43 | .001 |
| | Access to wineries/ wine clubs | .25 | .34 | .005 | -.17 | -.20 | .090 |

Table 26

Critical Beliefs that Significantly Predict Intentions to Frequent Drink and Engagement in Frequent Drinking across Age Groups

| Age | Women's Beliefs | <i>Intentions</i> | | | <i>Behaviours</i> | | |
|-------|-----------------------------|-------------------|---------|------------|-------------------|---------|------------|
| | | B | β | <i>sig</i> | B | β | <i>Sig</i> |
| 18-24 | Behavioural Beliefs | | | | | | |
| | Cost more than can afford | .06 | .11 | .048 | -.03 | -.03 | .633 |
| | Control Beliefs | | | | | | |
| | Having to drive | -.27 | -.19 | .001 | -.53 | -.14 | .019 |
| | Stressful week | .06 | .13 | .040 | .44 | .38 | <.001 |
| 25-34 | Behavioural Beliefs | | | | | | |
| | Help me to unwind | .16 | .20 | .001 | .85 | .34 | <.001 |
| | Normative Beliefs | | | | | | |
| | Concerned family or friends | -.15 | -.20 | .002 | -.57 | -.24 | <.001 |
| | Control Beliefs | | | | | | |
| | Pregnant or breastfeeding | -.26 | -.18 | .002 | -.57 | -.11 | .092 |
| 35-44 | Control Beliefs | | | | | | |
| | Pregnant or breastfeeding | -.27 | -.22 | .001 | -.64 | -.13 | .095 |

| | | | | | | | |
|-----------------|--------------------------------|------|------|------|------|------|-------|
| 45-54 | Behavioural Beliefs | | | | | | |
| | Make me feel relaxed | .21 | .18 | .046 | 1.18 | .38 | <.001 |
| | Control Beliefs | | | | | | |
| | Having health issues | -.40 | -.26 | .001 | -.87 | -.20 | .019 |
| 55 and above | Normative Beliefs | | | | | | |
| | Friends | .13 | .19 | .046 | .62 | .25 | .013 |
| | Control Beliefs | | | | | | |
| | Family commitments I must keep | -.24 | -.27 | .006 | .01 | .00 | .98 |
| | Stressful week | .14 | .20 | .047 | 1.02 | .44 | <.001 |

Table 27

Women's Critical Beliefs Significantly Predicting Intentions to Binge Drink and Engagement in Binge Drinking across Age Groups

| Age | TPB Construct | <i>Intentions</i> | | | <i>Behaviour</i> | | |
|-------|---|-------------------|---------|------------|------------------|------|-------|
| | | B | β | <i>sig</i> | | | |
| 18-24 | Control Beliefs | | | | | | |
| | Being uncomfortable (e.g., feelings in an environment) | -.10 | -.14 | .002 | -.04 | -.06 | .375 |
| | Short term side effects of alcohol (hangovers) | -.17 | -.27 | <.001 | -.09 | -.16 | .018 |
| | If tolerance was better (e.g., less "suffering" the next day) | .11 | .18 | .001 | .02 | .04 | .600 |
| | If I didn't have children | .09 | .14 | .008 | .07 | .12 | .117 |
| | If it was my birthday | .16 | .19 | .001 | .09 | .13 | .092 |
| | If I was close to wineries or wine clubs | -.06 | -.10 | .026 | .05 | .10 | .148 |
| 25-34 | Behavioural Beliefs | | | | | | |
| | Help me to have fun | .11 | .14 | .015 | .14 | .17 | .010 |
| | Control Beliefs | | | | | | |
| | Having non-family commitments I must keep | -.15 | -.15 | .010 | -.19 | -.16 | .011 |
| | Short term side effects of alcohol (hangovers) | -.16 | -.24 | <.001 | -.21 | -.29 | <.001 |

| | | | | | | | |
|--------------|--|------|------|-------|---|------|------|
| 35-44 | Control Beliefs | | | | | | |
| | Having health issues | -.21 | -.13 | .045 | -.27 | -.18 | .015 |
| | Short term side effects of alcohol (hangovers) | -.13 | -.17 | .008 | -.14 | -.19 | .011 |
| | If I am on holidays | .15 | .20 | .033 | .12 | .17 | .053 |
| | If there is an important sporting event | .17 | .33 | <.001 | .10 | .20 | .023 |
| | If I was close to wineries or wine clubs | -.09 | -.16 | .034 | -.05 | -.10 | .257 |
| 45-54 | Behavioural Beliefs | | | | | | |
| | Make me feel relaxed | .16 | .23 | .007 | .03 | .05 | .599 |
| | Control Beliefs | | | | | | |
| | Short term side effects of alcohol (hangovers) | -.12 | -.18 | .035 | -.12 | -.18 | .060 |
| | Values (e.g., religious) not aligned with drinking | -.13 | -.25 | .001 | -.10 | -.18 | .064 |
| | If drinking venues were in walking distance | .08 | .16 | .035 | .14 | .26 | .003 |
| 55 and above | Behavioural Beliefs | | | | <i>Only 10 women in this age cohort (n =10) reported engagement in binge drinking and hence a regression for this age group and behaviour could not be conducted.</i> | | |
| | Make me feel irresponsible | .10 | .20 | .046 | | | |
| | Control Beliefs | | | | | | |
| | Short term side effects of alcohol (hangovers) | -.15 | -.25 | .008 | | | |

10.4 Discussion

The current analysis examined the extent to which women's alcohol-related behavioural, normative, and control beliefs predicted intentions, and subsequent engagement in low risk drinking, frequent drinking and binge drinking across age cohorts. It was evident that women's intentions to drink differed as a function of their age. Specifically, younger women were more likely to report intentions to binge drink than older women, and older women were more likely than younger women to report an intention to drink frequently. Although the findings are consistent with women's drinking patterns found in Australia (AIHW, 2011a), they do highlight the need to further investigate the risks associated with frequent drinking particularly for older women. Frequent drinking has its own set of risks as it can: result in higher alcohol tolerance levels which can lead to increased volumes to gain the desired effect (e.g., relaxation); be related to increased likelihood of frequent binge drinking (Paradis, Demers, Picard, & Graham, 2009); and even in the absence of binge drinking can still represent high volumes of alcohol intake across a lifetime and long term harms (Wetterling, Veltrup, Driessen, & John, 1999). Further, if typical quantities of alcohol consumed are often underreported (Stockwell et al., 2004) and alcohol is frequently present in women's lives, such habituated drinking brings with it greater exposure to long term harms.

Overall, a range of behavioural beliefs, control beliefs, and normative beliefs were found to predict women's intentions to drink, and the majority of these were also shown to be predictive of actual alcohol consumption. Consistent with previous studies, identification of such beliefs is significant to the extent that they may guide the development of targeted interventions, such as public education and health promotion messages (Ajzen, 2007; French & Cooke, 2012). It follows then, that identifying the key beliefs underpinning women's intentions, and actual behaviours, to engage in drinking could inform message development. Further specific examples will be provided in this discussion but, just as one overall example, identifying the perceived disadvantages associated with engaging in binge or frequent

drinking would provide important insights into perceived negative aspects of drinking that messages could emphasise to ultimately reduce alcohol-related risks.

Within the final regression results, only three normative beliefs were found to significantly predict women's intentions to drink (i.e., low risk, Table 25 and frequent, Table 26), and two of these were also predictive of actual behaviour. Normative beliefs were found to predict intentions to frequent drink for women aged 25 to 34 years. Specifically, the findings revealed that perceptions of having family or friends concerned about one's drinking reduced one's intentions to frequent drink (Table 26). Notably, for women aged 55 and over, perceptions of their friends' alcohol-related expectations were positively associated with intentions to frequent drink (Table 26). For this age cohort, normative beliefs regarding spouses' alcohol-related views also significantly predicted women's intentions to low risk drink (Table 25).

These findings highlight age and possible generational differences in regards to the importance of different normative referents around alcohol. Such insight highlights how, for instance, age-based educational messages could be designed to either emphasize those most relevant normative influences who disapprove of one's drinking or to challenge those normative referents perceived as positively influencing one's drinking. The current findings build upon previous evidence of partner influence as a risk factor for alcohol-related harms (Leonard & Mudar, 2004) and the efficacy of normative feedback interventions (Neighbors, Lewis, Bergstrom, & Larimer, 2006), all of which highlight the importance in gaining an understanding of such potential intervention targets.

Until now, the beliefs underlying intentions to engage in the specific drinking behaviours have not been widely examined. In the discussion below, beliefs specific to age groups are highlighted and then commonalities across age groups are discussed. These results greatly assist in identifying specific age appropriate targets for intervention and more general points of intervention applicable to women of varying ages.

10.4.1 Low risk drinking

There were no age-related differences of women's intentions to drink only one or two drinks occasionally. Women's intentions to low risk drink were influenced by beliefs that varied somewhat according to age group, but there were some patterns evident. The results indicated that for women in all age groups from 25 and above, family concerns significantly affected their intentions to engage in low risk drinking. On inspection of the behavioural beliefs influencing intentions reported by women aged between 25 and 44, the age cohort most likely associated with raising a family, it was revealed that even having an occasional drink is perceived as interfering with family life and therefore this aspect was a perceived disadvantage. For women aged 45 to 54, being a mother was perceived by participants in this study as a significant barrier to their intentions to low risk drink (i.e., control belief - barrier).

Perceived benefits and facilitators of consuming alcohol were identified as significant predictors of intentions for women aged between 35 and 54. In particular, these beliefs included perceiving an advantage of drinking as "helping one to relax" (behavioural belief) and a perceived facilitator of drinking being it reduces stress (control belief), and were also significantly predictive of women's reported drinking behaviour. These findings may be reflective of a time of life where family and work commitments are high and a need for work, life and family balance is needed (ABS, 2011; R. Green, 2008). Although these results refer to intentions to low risk drink and thus are indicative of a safer way to drink, there may be value in challenging perceptions that alcohol is an appropriate and acceptable stress management technique. Across all age groups, one of the most consistent motivations which predicted having an occasional drink related to special occasions and celebrations (e.g., birthdays, Christmas, holidays). It seems that the presence of special occasions and celebrations is a strong and consistent facilitator of women's intentions to low risk drink and engagement in such drinking behaviour, irrespective of one's age. Interestingly, family concerns did not emerge as significant predictors of actual drinking, indicating that these

beliefs may be more related to planning and intentions than behaviour itself, while beliefs around drinking being a source of stress relief and celebration were associated strongly with both intention and behaviour.

10.4.2 Frequent drinking

Older women, aged 45 years and above, were more likely to report an intention to drink frequently compared with younger women, a finding that is consistent with other research (AIHW, 2011a; Makela et al., 2006). Examination of motivating beliefs underlying these women's intentions to drink on six or more days per week, revealed beliefs relating to: relaxation (behavioural belief – benefit) and stress relief (control belief – facilitator); family influence (normative) and responsibility (control belief – barrier); and health issues (control belief – barrier) (Table 26). For these older women, behavioural beliefs in terms of perceived advantages of drinking that “made them relax” (aged 45 to 54) and control beliefs with regard to facilitating their drinking when they are “having a stressful week” (aged 55 and above) were associated not only with intentions to frequent drink, but also were strong predictors of actual drinking frequency. In regards to normative beliefs, women aged 55 years and above also reported that they expected friends to be supportive of frequent drinking. The only two barriers to frequent drinking which were identified related to health issues (aged 45 to 54) and family commitments (55 and above). Health and family were a concern for other age groups too.

Being pregnant or breastfeeding was reported by women aged between 25 and 44 as a significant control belief associated with reduced intentions to frequent drink, but this belief was not a significant predictor of actual drinking frequency. In support of these findings research highlights that parenthood can affect the frequency of women's drinking more so than men's drinking (Christie-Mizell & Peralta, 2009).

With the exception of the 35 to 44 years age cohort, all of the age groups reported a perceived advantage of alcohol as it offering a means to relax (behavioural beliefs – benefit)

and to be used as a stress management tool (control beliefs – facilitator). Both of these beliefs were also significant predictors of frequent drinking behaviour. Such consistent findings across age cohorts indicate a need to address stressors specific to women and promote alternative healthy stress management techniques.

Although Australian drinking guidelines do not explicitly warn against drinking on a daily basis they indicate long term health risks associated with high frequency of drinking (NHMRC, 2009). Further, for women, even moderate drinking levels are associated with certain health risks such as breast cancer (Pirisi, 2000; Wang et al., 2014) and drinking patterns and associated beliefs can be predictive of later drinking behaviours that may be risky (Melo et al., 2012; Parks & Heller, 2013). The current findings support the idea that women may be considering alcohol as an advantage in terms of its use as a relaxation and stress management tool. Hence, promotion of alternative stress management tools and awareness regarding long term risk exposure needs to be considered in future public health policy. As with the findings for low risk, family-oriented beliefs were not significantly predictive of behaviour, again highlighting the subtle effect of these beliefs on planning and intention, while stress reduction beliefs were predictive of both intention and behaviour.

10.4.3 Binge drinking

In line with drinking patterns in many developed nations (ABS, 2012a; AIHW, 2011a; Kanny et al., 2013; WHO, 2014), results from this study indicated that younger women were more likely to report intentions to binge drink compared with older women (Table 27). When investigating the beliefs predicting such intentions, the results showed that there were different underlying beliefs predictive of intentions to binge drink compared to the other behaviours, and for the most part, were also specific to different age groups. In particular, the findings highlighted the important influence of a broad range of behavioural and control beliefs.

For the women aged 18 to 24 who were most likely to binge drink, a number of control beliefs were found to be significant predictors, specifically beliefs which would facilitate their intentions to drink more than four drinks on any one occasion. These facilitators related to: birthday celebrations, if their alcohol tolerance was better, accessibility to wineries and wine clubs; and if they did not have children. Possibly, this latter facilitator is tapping into younger mothers who are no longer able to binge drink because of their responsibility as a mother, but further investigation is needed to clarify this result as this suggestion is only speculative. With increasing age, an interesting finding was the finding that the behavioural belief of “help me to have fun” was a significant predictor of intentions to binge drink in the 25 to 34 year olds but, not for 18 to 24 year olds. Previous research has identified elements of fun and excitement as motivating factors for young women (aged 18 to 30 years) (F. Hutton et al., 2013) and young people (aged 18 to 24 years) (Sinkinson, 2014) in their decisions to binge drink. The need to address young women’s perceptions of binge drinking as fun, whilst negating the associated risks, is underlined.

For women aged 35 to 44, a significant control belief which would prevent binge drinking which emerged related to health issues. In line with women’s drinking patterns (ABS, 2012a; AIHW, 2011a), this finding may indicate the transition from binge drinking to frequent drinking as women’s health becomes less tolerant of binge drinking over time. Further, women aged 55 years and above reported no significant benefits or facilitators predicting intentions to binge drink. Instead, perceived barriers such as short term effects of alcohol and behavioural evaluations that binge drinking “makes me feel irresponsible” were found to be significant predictors of intentions to binge drink. Such results highlight why this cohort is less likely to binge drink and further implies the existence of differing social norms with regard to women and the acceptability of binge drinking.

The main consistency in regards to the significant predictors of binge drinking across all age groups was that of the control belief of short term side effects (e.g., hangovers) which

was associated with significantly lower intentions to binge drink. Avoiding short term side effects was also significantly associated with self-reported engagement in binge drinking behaviours for women aged 18 to 44 years old. It would seem prudent then to target interventions to build upon women's perceptions about these beliefs, especially for the younger women who tend to binge drink at higher rates. An anomaly in the results emerged for the women aged 18 to 24 years and 35 to 44 years with regard to accessibility of "wineries or wine clubs". It was expected that the control belief "If I was close to wineries or wine clubs" would be a factor that facilitated intentions to binge drink, not the negative relationship that was actually found. One reason for this may be that context is the important factor wherein wineries are not perceived as venues in which to binge drink. Drinking context has been found to be an influential factor on drinking behaviours (Bergstrom, Lewis, Neighbors, & Oster-Aaland, 2006; Raciti, O'Hara, Reinhard, & Davies, 2013; WHO, 2014).

10.5 Implications

10.5.1 Implications across age groups

Across behaviours and age groups it became evident that two beliefs consistently underpinned probable targets of intervention. Firstly, although beliefs varied across age groups and drinking behaviours, beliefs surrounding alcohol as a tonic to a stressful week and a way to unwind and relax, were consistent across age groups and across behaviours. Implications from this current analysis call for a focus on women's decision-making regarding alcohol and stress-relief. The findings highlight the role that alcohol and drinking has taken on in the lives of contemporary women as a means of relieving stress. Furthermore, the findings suggest that there may be value in both challenging the notion that alcohol is an important and regular means by which to reduce stress and instead highlight healthy alternatives to stress relief including, for instance, going for a walk or taking a bath. Secondly, the perceived short term effects of binge drinking was found to be a barrier to engaging in this behaviour across all age groups. Alongside this finding, however, the finding

that the behavioural belief of “cause ill-health in the long term” was not a significant predictor in any of the regression models is, arguably, most noteworthy. It is noteworthy given that it suggests that many women may not be perceiving and/or are have limited awareness of the long term health risks associated with alcohol consumption, highlighting the need to raise awareness in regard to this issue.

10.5.2 Frequent drinking

For the older women intending to drink more than five days in a week, behavioural and control beliefs regarding relaxation and stress relief, respectively, and perceived peer expectations (normative beliefs) may be of value in informing intervention content. The belief that friends approve or expect a woman to drink frequently needs further investigation. Previous examinations have found misperceptions regarding normative beliefs around alcohol consumption, whereby individuals may well overestimate the perceived peer expectations to drink (Bergstrom et al., 2006). Consequently, this perception represents an important normative belief which needs to be challenged in targeted messages.

Although the current study did not investigate drinking locations, other studies have raised concerns about older women’s alcohol-related risk because of the way in which they drink (Epstein et al., 2007). If older women have an increased likelihood of frequent drinking in the privacy of their homes there may be less opportunity for detection of drinking problems (Epstein et al., 2007). As such, older women are thus exposed to a different set of risks compared to their younger counterparts, who may be more visible in public spaces where acute alcohol risk is more pertinent (Epstein et al., 2007). Hence, such evidence reiterates the need for a different set of interventions and public health messages for older women compared with younger women.

10.5.3 Binge drinking

The current analysis adds to other TPB research outlining the importance of beliefs in devising and informing targeted interventions (French & Cooke, 2012; Hamilton & Schmidt,

2013). Specifically, this current analysis' results suggest that, for the younger women who engage in binge drinking, it will likely be of value to devise messages that target the beliefs that facilitate binge drinking. Public health promotions depicting young women as having fun and celebrating birthdays without binge drinking could raise awareness and combat the belief that heavy drinking is the main way to celebrate. Research has identified cultural and normative influences on young people to celebrate birthdays, particularly milestone birthdays (e.g., 18th and 21st), with excessive alcohol consumption (Day-Cameron et al., 2009; Loughran, 2010; Neighbors, Spieker, Oster-Aaland, Lewis, & Bergstrom, 2005). Such notions could be challenged with increased public awareness and public health campaigns depicting healthier fun alternatives. In concordance with such messages, building upon control beliefs that this current research has demonstrated to decrease intentions and likelihood of engaging in drinking, could be emphasised. For instance, promoting healthier options to celebrating that don't have short term side effects like hangovers. It seems that such public awareness campaigns that target young people's drinking is having some effect as risky drinking has started to stabilise in these cohorts (AIHW, 2014), but there is still much room for improvement, especially with regards to women's drinking and older cohorts.

As discussed above, emphasizing the short term health risks and side effects of drinking more than four drinks on any one occasion could help to consolidate such a barrier to binge drinking for women of all ages. In line with this suggestion, young women reported that if their tolerance for alcohol meant that they would suffer less adverse reactions to binge drinking, it would facilitate more binge drinking. This belief needs to be challenged, but also outlines the presence of a desire to binge drink. It also raises the point that if women had a high tolerance level then potentially their consumption would increase. This was a theme that arose in the interviews (Study 2). Hence, women's beliefs around tolerance of alcohol and ways to negate short term risk needs further investigation.

10.6 Strengths and limitations

This current analysis has a number of strengths including: the examination of women's drinking across a broad age range and across different drinking behaviours; having a large sample of women; and using a well-established theoretical framework to identify critical beliefs underlying intentions to engage in drinking behaviours. Furthermore, this study examined differences in beliefs across age and behaviour that can inform targeted interventions. One limitation is the cross-sectional nature of the study and hence results must be interpreted as such. Furthermore, whilst possible intervention foci have been identified, further research is needed to assess the efficacy of interventions targeting beliefs to reduce alcohol-related risks.

Overall, however, the current analysis has increased understanding of women's decision-making around intentions to drink, specifically pertaining to three drinking behaviours. It has provided a picture of the underlying beliefs and patterns that significantly influence women of varying ages intentions to low risk drink, frequent drink and binge drink. Such an understanding can help target preventative measures for those women at risk of alcohol-related harms or interventions for those who are currently partaking in risky drinking practices.

10.7 Conclusion

Given the existing knowledge that women's drinking is emerging as a major issue across all age groups, this analysis has sought to identify how a woman's intentions to drink and the underlying beliefs predictive of those intentions may change over their lifespan. The current study examined the underlying beliefs which predict women's intentions to consume alcohol and engagement in drinking behaviour. The current analysis provided evidence that the beliefs underlying intentions varied according to age group and drinking behaviour. The presence of differing beliefs that underlie women's motivations to drink according to age group and drinking behaviour demonstrated the importance of tailoring interventions and

public health messages to address specific age groups and drinking behaviours, thus targeting those most at risk and the most salient motivations underpinning their behaviour.

Additionally, identification of patterns across drinking behaviours and age has increased understanding of interventions that can provide a broader application. Drinking as a stress management tool was highlighted, as was women's increased awareness of the short term effects of risky drinking behaviours, but seemingly limited awareness of the long term effects.

Overall, this analysis has addressed a number of gaps in the literature with regard to women's drinking using a novel approach of integrating a well-known theoretical model to underpin a large sample size of empirical data (i.e., addressing the fluctuating drinking patterns with regard to different age cohorts; addressing intentions to consume alcohol in three different ways; and examining the significant underlying beliefs predictive of women's intentions to consume alcohol and subsequent engagement in such behaviours). The key beliefs identified through a substantial cohort of women of various ages has been identified as important foci for future targeted interventions such as public health messages to address specific age groups and drinking behaviours, rather than a one size fits all approach.

This current chapter (Chapter 10) outlined the second analysis from the survey data (Study 3) and concludes the analyses undertaken in this programme of research. The final chapter (Chapter 11) now follows to present the integration and synthesis of all of the studies in this programme of research. It will also outline the overall strengths, limitations and suggested directions for future research as a result of this programme of research.

Chapter 11 – General Discussion

11.1 Introduction

This discussion chapter brings together the results of the research from Phases 1 and 2 to present a synthesis of the key findings of the current programme of research. It highlights the contribution of the research to theory as well as the implications of the findings for prevention and early intervention of women's substance misuse behaviours. The strengths and limitations of the research are discussed with the chapter concluding with some recommendations for future research.

The current programme of research was conducted in two phases: an inductive phase comprised of two studies, (Study 1 was an observational study that included a document analysis, Study 2 were interviews with women); and a deductive phase comprised of one study (Study 3 was the survey) that generated two analyses (see Figure 9 for a diagrammatic representation of the programme of research). The initial phase of the research programme was dedicated to exploring an under-researched area of women's drinking through ethnographic methods. With limited research available on recent trends in women's drinking, the qualitative method of enquiry was particularly useful in this phase as it allowed an inductive, or 'ground up', exploration through naturalistic enquiry.

The aim of Phase 1 was to explore the potential array of multiple system influences on women's drinking. Phase 1 results indicated that the most influential factors impacting on women's drinking behaviour were at the intra-individual psychosocial level, which were therefore examined in greater detail in Phase 2. The programme of research examined women's drinking through two lenses, in accordance with systems identified as the macroscopic and microscopic. Consistent with these lenses, the integration of the findings is discussed in two sections below. First, Phase 1 findings are integrated to discuss the multiple levels of influences on women's drinking in terms of the context in which women in Australia consume

alcohol (cultural, exosystem, microsystem) and thus address Research Questions 1 to 3 (see Figure 9). Second, an integration of findings for all three studies, across both phases within the overall programme of research is presented. This second section, that includes all studies' findings, discusses: the psychosocial influences, answering Research Question 4; chronosystem factors, answering Research Question 5; and, finally, how factors and systems are interlinked, answering Research Question 6.

11.2 Integration of Key Findings

11.2.1 Evidence of Multiple Systems of Influence

Both Studies 1 and 2 provided evidence that multiple systems of influence are impacting upon women's drinking behaviours. While more proximal systems of influence were evident in the women's accounts of alcohol consumption as found in Study 2, there was also evidence of cultural and exosystem influences. Such findings are consistent with Bronfenbrenner's model in that individuals have a direct relationship, and are actively engaged, with factors at a microsystem level even though these factors are themselves a function of the more distal or indirect influences (2006).

Overall, the findings of the current research programme provided support for the BMHD (Bronfenbrenner & Morris, 2006) with factors found to influence women's alcohol consumption at each system level and relationships between factors and levels were evident. These factors are discussed in the following sections commencing at the broadest level of the framework, cultural influences, and then narrowing down to the intra-individual level, psychosocial factors, before discussing alcohol-related differences across age cohorts, in accordance with the chronosystem of the framework. Also discussed is how all of these systems are interlinked to result in a complex interplay of factors existing across systems to influence women's alcohol consumption.

11.3 Section 1 Discussion – Phase 1 - Through the Macroscopic Lens

Section one integrates the findings of Phase 1 to discuss the cultural, exosystem and microsystem factors influencing women's drinking across a range of age cohorts. In doing so, this section answers Research Questions 1 through to 3.

11.3.1 Cultural Factors – RQ1 - Which cultural factors (e.g., cultural attitudes and beliefs around women and alcohol) influence women's alcohol consumption?

Cultural influences on women's alcohol consumption, in terms of cultural representations of gender and national identity, were evident in Phase 1, in both Studies 1 and 2 (See Figure 9 above). The reflection of cultural attitudes in marketing, media and drinking venues, discussed below, also underline the multidirectional relationships that were evident in the Phase 1 findings. These relationships are in line with Bronfenbrenner's (2006) framework and demonstrate the mechanisms by which alcohol-related cultural attitudes can manifest at the social and psychosocial levels.

11.3.1.1 Gender identity

Established from the triangulation of Study 1 and Study 2 findings, it was evident that culturally prescribed femininity and gender roles influenced women's drinking. Gendered representations of women drinking were evident in online alcohol-related marketing and media, in drinking venues, and in the women's accounts of alcohol consumption. The interview data (Study 2) highlighted women's attitudes regarding acceptable ways for women to drink and provided examples of how gender norms are conveyed (e.g., through advertising, parental and peer messages). Gender norms around alcohol consumption determined acceptable drinking behaviours that did not impinge on femininity and respectability. These findings are comparable to research showing relationships between substance use and femininity (Lindsay, 2006; Lyons, 2009), masculinity (de Visser & Smith, 2007a), and gender roles (Lyons & Willott, 2008; Virokannas, 2011). Similarly, de Visser and McDonnell (de Visser &

McDonnell, 2012) found a double standard in their research into drinking behaviours, gender identity, and gender role beliefs wherein beer drinking, binge drinking and public drunkenness tends to be perceived as masculine while women's drinking behaviours are judged more harshly compared to men's drinking. The interview findings also revealed that women perceived a change in the acceptability for women to drink alcohol more now, compared to women of previous generations.

Participants attributed such differences in alcohol-related attitudes and behaviours to changing gender roles and social norms across generations. Gender roles within a woman's life, such as marital status or parental status, were reported as a factor which affected a woman's alcohol consumption. The impact of gender roles was most evident in the interview data when a change in role impacted upon a woman's drinking behaviour (e.g., becoming a mother, becoming a partner). Such findings are consistent with research that outlines the importance of gender identity and gender roles in substance use behaviours (Bergmark, 2004; Conroy & de Visser, 2013b; Virokannas, 2011).

11.3.1.2 National identity

Observations of 'cultural' (e.g., Melbourne Cup) nights or national sporting events held in drinking venues, as well as the women's interview data provided evidence of the influence of national identity, and importance of alcohol in Australian culture. Additionally, cultural celebrations, such as Christmas and New Year, were times that women reported higher rates and likelihood of drinking. Such important cultural events were flagged as times when drinking was so embedded in the cultural practices that it even extended to those women who reported rarely drinking, but did so on such "special occasions". Interview data (Study 2) drew attention to the extent to which drinking practices were engrained in Australian culture and the implicit social acceptance of drinking that the women reported.

It would seem that alcohol-related cultural messages are so prolific that they have been internalised to become part of many women's attitudes (i.e., represent psychosocial influences). This finding is in line with seminal work (Geertz, 1973; Gemignani & Peña, 2007) on how culture becomes part of an individual's perceptions. Hence, the findings from the interviews and the critical beliefs analyses (Study 2 and Study 3) illustrate a link between alcohol as culturally embedded in Australian cultural values and identity, and the intra-individual psychosocial factor of implicit social acceptance of drinking. The perceptions that certain cultures (e.g., Australia, Germany) value alcohol consumption emphasise the need to challenge or alter these perspectives in order to reduce the acceptance of prolific drinking.

11.3.1.3 Challenging and changing cultural influences on drinking behaviour

The need to challenge cultural influences was particularly evident when women reported changes in their drinking behaviour as a result of changing country of residence and when women who did not enjoy alcohol consumption felt that it was converse to their national identity. The cultural themes that emerged from the interview data in Study 2 also were reflected in alcohol-related or venue-related media and marketing identified as part of the observational study (Study 1) (discussed in the next section). Such findings highlight the need to challenge or minimise such culturally related alcohol promotion in order to shift cultural attitudes. For instance, public awareness campaigns aimed at undermining alcohol consumption as part of an Australian identity could instead promote a healthier, alternative national identity (e.g., an alcohol reduced/free identity). Similarly, cultural celebrations such as Melbourne Cup day with its representations of champagne-sipping elegance could be counteracted with representations of the harms that are associated with higher consumption on those days, and also highlight strategies to stay safe.

11.3.2 Exosystem Factors – RQ2 Which social factors at an exosystem level (e.g., more distal factors such as media, legislation, venue policies, alcohol marketing) influence women’s alcohol consumption?

This question, in line with the BMHD, was also generated as a result of reviewing the existing empirical evidence regarding the effects of media, marketing and legislation upon alcohol consumption in general (Corrigan et al., 2005; Gallego-Moya et al., 2014; Karakos, 2014; Valente et al., 2007). In the current research programme, exosystem influences were evident across both studies in Phase 1. The observations in Study1 provided support for the influence of factors such as alcohol marketing, venue policy and promotions, surrounding infrastructure (e.g., nightclub districts), and public transport on women’s drinking behaviours. These factors are, in part, the result of industry, legislation (e.g., licensing and drink driving laws) and public policy. Complementing these findings, the interview data in Study 2 identified infrastructure (e.g., transport options, proximity of drinking venues) and legislation as the two most evident influences on women’s drinking at this level.

Hence, findings from both Studies 1 and 2 supported the relationship between infrastructure, legislation, alcohol marketing and venue policy. Women’s choice of venues, length of stay and amount drunk appeared partially dependent on accessibility to alcohol and venues, as well as their reliance on transport options. Drinking behaviour also seemed to be influenced by venue promotions (e.g., free drinks for women after midnight). While alcohol marketing was prolific in all venues²², for the most part, the women interviewed claimed that they were not influenced by alcohol marketing. Yet, the venues’ online social networking sites comprised a form of advertising that has since come under examination by The Alcohol

²² Schoolies was the exception of “schoolies” as legislation prohibits alcohol marketing.

However, intoxication was evident in the surrounding streets.

Beverages Advertising Committee (The ABAC Scheme, 2011) and subsequently been legislated as a form of alcohol marketing (Brodmerkel & Carah, 2013). Such social networking sites advertise upcoming events and post photos of customers who have attended their venues and invite comment, which often espouse the fun of the evening. In contrast to the women's reports denying marketing influences, the very nature of social networking sites means that some women are participating in them. The interesting contrast between the effects of alcohol advertising (Gallego-Moya et al., 2014; Karakos, 2014) with the women's denial of such influence suggests the implicit nature of such mechanisms (Lau-Barraco, 2009; Pop & Iorga, 2012; Shin & Kim, 2011). For instance, the Third Person Effect (Davison, 1983) puts forward the argument that people tend to believe that marketing messages have a greater impact upon others compared with themselves, even though such messages can impact behaviour (Shin & Kim, 2011). One explanation for the existence of the Third Person Effect relates to an ego defensive mechanism whereby individuals perceive themselves as less susceptible to being influenced by messages intending to be persuasive relative to others (Perloff, 1989).

Finally, the prohibitive effect of drink driving legislation influenced venue choice so that drinking without the need to drive was sought after (e.g., at home or a venue within walking distance or with available public transport). Otherwise, such legislations tended to curb consumption when a woman was the designated driver and/or provided 'a legitimate excuse' for those that did not want to drink but felt pressured to do so.

11.3.2.1 *Challenging and changing exosystem influences on drinking behaviour*

These exosystem factors indicate one potential avenue of intervention to reduce risk through public policy and legislative changes (Chatterton & Hollands, 2002; Room et al., 2005). Some of these policies and legislative prevention recommendations are in line with the current Australian government goals (e.g., stricter licensing laws, examination of alcohol

marketing) (Glass, Mowbray, Link, Kristjansson, & Bucholz, 2013). From a public policy perspective, a noticeable difference between alcohol and tobacco advertising was observed (Study 1) at the Melbourne Cup Day where alcohol advertising was ubiquitous, but the tobacco stall was black featureless and without any advertising. Similar to the interview (Study 2) findings regarding the importance of legislation at an exosystem level, Reeve and Magnusson (2005) drew analogies between the legislative interventions of two health behaviours, namely smoking and drinking. Such findings support the need for a legislation which restricts alcohol marketing as a means of potentially decreasing alcohol-related harms.

All studies also highlighted the role of infrastructural influences on women's alcohol consumption. Examination of town planning of nightlife areas, on the one hand, leads to accessibility to alcohol and drinking venues to facilitate drinking without the need to drive. On the other hand, centralised drinking venues enable increased control in such areas, but the policing of such districts is itself fraught with problems (Gray, 2010). Hence, policy and town planning decisions to this regard are complex, and further research is required in order to maximise the effectiveness of harm reduction in terms of identifying infrastructure design which maximises safety.

11.3.3 Microsystem Factors – RQ3. Which social factors at a microsystem level (e.g., more proximal factors such as peer influence, family influence, drinking context) influence women's alcohol consumption?

The most notable factors influencing drinking at the microsystem level were the drinking venues themselves and the people in the women's immediate environment. The observational study (Study 1), which focussed on observing women's drinking at a range of public drinking establishments and events, also highlighted the importance of peers or friendship groups in the public venues. In addition to peer influence, the in-depth interviews in Study 2 revealed important influences associated with alcohol-related messages conveyed by

family members and work colleagues. For instance, some family members encouraged drinking, whilst others warned against alcohol-related harms.

Study 1 findings highlighted an array of influences in venues that appeared to affect both patronage and drinking behaviour, such as the venue's image, marketing promotions, physical environment, security, mood lighting, accessibility of alcohol (e.g., five bars in one nightclub) and music. Venue promotion, and the 'events' venues held, often attracted a 'certain type' of clientele, and usually catered for one gender more than the other. Such findings are consistent with other research which has also demonstrated the impact of drinking venue upon alcohol consumption, the clientele attracted and alcohol-related behaviour (Chatterton & Hollands, 2002). While Hughes et al. (Hughes et al., 2011) indicate that factors such as a permissive environment, discounted drinks, promotions, crowding, loud music and venue staffing contribute to increased consumption and alcohol-related harms, they also point out the need for further research in this area. The combination of venue atmosphere, accessibility of alcohol and social influence can increase consumption, but could possibly also be influenced by other people in the women's environments.

The influence of peer groups in public drinking venues was evident in public drinking venues, based on observations in Study 1, but other social influences (e.g., family, partners) were also found to influence perceived acceptable drinking behaviours (e.g., as per Study 2 interview findings). Findings across both Studies 2 and 3 indicated that the women's immediate social networks function to convey messages regarding what is acceptable alcohol consumption, and thus they can play either a risk-averse or risk-inductive role. The interview data from Study 2 revealed that there was little consistency as to which groups (i.e., peers compared with family or work colleagues) would encourage or discourage consumption. However, all of the women interviewed described expectations to drink in socially prescribed situations (e.g., partying, birthday celebrations, weekends) that were derived from many groups

in their microsystem. Whilst such expectations seemed mostly accepted amongst the women interviewed, some felt pressured, rather than willing, to conform. The women interviewed reported that transgressions from prescribed drinking behaviours were often met with negative consequences (e.g., labelling, cajoling). Such findings regarding social influences indicate a potential overlap with intra-individual processes, such as psychosocial factors evident in models such as the TPB (Ajzen, 1991) (e.g., microsystem factors and subjective norms). Further discussion of the integration of Bronfenbrenner's BMHD (2006) and the TPB (1991) is presented in Section 11.4 below.

Another interesting finding to emerge from the interviews was that changes in social networks that may be a result of a life event (e.g., job change, getting a partner), could also lead to a change in the alcohol-related norms women were exposed to, which, in turn, influenced their drinking behaviours. The social influence on alcohol consumption and drinking behaviours is well-documented (Cleveland et al., 2013; Conroy & de Visser, 2013b; Cumsille, Sayer, & Graham, 2000; Gannon et al., 2014; M. A. Miller, Hays, & Fillmore, 2012), and for women, much research has previously focussed on the impact of partners on women's drinking behaviour (Lemke, Schutte, Brennan, & Moos, 2008). The findings from Studies 1 and 2 also highlight the risk-averse or risk-inducive roles that these social networks may play in their influence upon women's drinking. These findings provide a contribution to the existing literature on women's alcohol consumption and potential points for interventions aimed at reducing consumption levels. While much evidence exists as to the risk-inducive roles that peers play (Fletcher, 2012; Lemke et al., 2008; Sancho, Miguel, & Aldás, 2011), there is little research on the risk-averse roles that peers can play, with most of the latter (literature on risk-averse peer roles) focussed on young people in prevention or rehabilitation programmes (Karakos, 2014; Valente et al., 2007). As discussed in the next section, a potential intervention to target women's drinking may include public education/awareness raising campaigns which

highlight the extent to which others, and a range of others, may influence one's alcohol consumption.

11.3.3.1 – Challenging and changing microsystem influences

The current research findings as well as supporting existing literature highlight the need for interventions to address influences at a microsystem level in order to reduce alcohol-related harms. Specifically, the evidence indicates the need to target the influences of venues and risk averse and risk-inducive roles that social networks play. As previously discussed, the physical environment and marketing within venues promotes drinking and accessibility to alcohol to increase consumption. Mitigation of risky drinking can be targeted through some simple physical adaptations that facilitate space (i.e., removing oneself) from the drinking context. For instance, consistent with the observational findings (Study 1) and interview findings (Study 2) the toilet in a public drinking venue was a space where women could get away from the 'intoxicating mood' in the club, assess their levels of inebriation and consequent behaviours. This finding suggests that this physical space away from the drinking areas may be capitalised upon. For instance, this space not only removes one away from the drinking context, but it also represents an important potential avenue for delivering messaging (e.g., signage/messaging which encourages women to regain awareness of their levels of intoxication or which provide 'reminders' of alcohol-related risks and promote a sense of agency in choosing subsequent drinking behaviours).

The influence of drinking venues upon increasing women's alcohol consumption could be addressed by simple interventions such as water stations at each bar or provision of "time out spaces" that give people a break from the drinking environment and a chance to be more aware of their state of inebriation and drinking behaviours. Other empirical evidence (B. A. Miller, Holder, & Voas, 2009) stress the importance of such physical space interventions and such interventions, even in the form of awareness raising, are already occurring to a small

degree (e.g., posters highlighting gambling associated harms) in bathrooms in Australian casinos and hotels to mitigate gambling addiction harms (Australasian Casino Association, 2009).

Similarly, public education campaigns could target the influence of social networks on women's drinking behaviours in order to promote healthier influences. Whilst some existing public health campaigns target young people's binge drinking (Ballakoor et al., 2001; Corbin et al., 2013) only a few focus on young women's drinking (Queensland Government, 2008). There is an absence of campaigns that combat such issues as: the increasing trends of women's consumption across the age ranges; women's heightened exposure to alcohol-related life time risk; and the problematic drinking that occurs in private settings where older women reported engaging in most of their drinking.

Findings from this current programme of research provide support for the potential value of public education campaigns which address these aforementioned issues. Further recommendations in regards to potential intervention strategies to reduce women's risky alcohol consumption include: awareness-raising of who may be influencing women's choices to drink; how this influence may be occurring; and how this exposure to risk may change across time and context. Arguably, a key aim of such campaigns would be to challenge the way in which individuals convey expectation and pressure on women to drink, and to provide strategies (e.g., communication strategies that help women to voice their alcohol-related decisions independent of peer expectation) for those women wishing to limit their drinking without fear of reprisal. Such interventions are related to the psychosocial influence of awareness. Psychosocial influences are outlined in the next section that integrates both Phase 1 and 2 of the current research programme and thus incorporate findings from all studies (Studies 1, 2 and 3).

11.4 Section 2 Discussion – Both Phases - Integration of the Macroscopic and Microscopic lenses

This section integrates the findings from all of the studies in both Phases 1 and 2 to answer Research Questions 4 and 5, pertaining to psychosocial factors and chronosystem factors, respectively. The integration of both phases to discuss the psychosocial and chronosystem factors is warranted, at this point of the discussion, as it reflects the nature of the current research aims and exemplifies the framework, in which this research is embedded. That is: the research approach has focussed in on the psychosocial factors using both a broader, BMHD lens as well as a TPB lens and; the systems of influence are highly interrelated. Additionally, discussion of the chronosystem factors also lends itself to integration of both phases, as the evidence from this system draws from all of the other systems. The discussion from herein, then, demonstrates how the integration of the TPB (Ajzen, 1991) with the BMHD (Bronfenbrenner & Morris, 2006) offers a comprehensive insight into the array of factors influencing women's drinking in an Australian context.

11.4.1 – RQ4 Which psychosocial factors (e.g., women's attitudes, beliefs and values about alcohol) influence women's alcohol consumption?

This section discusses the integrated findings of all studies with regard to the intra-individual psychosocial influences underlying women's decisions to consume alcohol. Both the qualitative studies (Study 1 and 2) and the survey (Study 3) contributed to understanding the psychosocial factors influencing women's drinking. It is in this section, however, that the TPB (Ajzen, 1991) focusses in on the psychosocial influences. The TPB allowed an examination of direct predictors (i.e., subjective norms, attitudes, perceived behavioural control) of intentions to frequent drink and binge drink (see Chapter 9). Indirect determinants (i.e., normative beliefs, behavioural beliefs, control beliefs) of intentions to low risk drink, frequent drink and binge drink are also discussed in the critical beliefs analyses (see Chapter 10).

To preface this section, a note is required in regards to the discussion relating to intentions. The TPB identifies intention as a key psychosocial factor with it being the most proximal determinant of behaviour, and thus this conceptualisation is adhered to in Study 3 and is integrated with Study 1 and Study 2 findings. Discussion of intentions is more broadly discussed with regard to the interview findings (Study 2). Overall intentions is discussed as part of the psychosocial in the current chapter, but is also discussed later, in section 11.4.2 as part of the findings regarding the chronosystem (e.g., determined drunkenness → incidental drunkenness). The decision to include intentions at this point in the dissertation was due to the fact that one of the most salient findings with regard to intentions was the manner in which intentions to drink changed across age cohorts. Consequently, discussion of intentions to drink was considered most relevant to discussion of the influence of the chronosystem even though, consistent with the BMHD, it is acknowledged that it is difficult to delineate and assign influences to just one system.

11.4.1.1 Advantages, Disadvantages, Facilitators and Barriers of drinking

The interview findings (Study 2) revealed a number of perceived advantages and disadvantages toward drinking and drunkenness. These perceptions differed between individuals and were often based on past experiences with alcohol. It was evident that some of the women sought ‘desired’ effects of alcohol, especially with regard to the disinhibitory, relaxant, and anxiolytic effects. Consistent with these findings, the critical beliefs analyses (Chapter 10) highlighted a range of behavioural beliefs underlying women’s intentions to, and engagement in low risk drinking, drink frequently, and binge drink. Reported perceived advantages of drinking in general included helping women to feel relaxed and unwind. Consistently, the women perceived that if they had had a stressful week that intentions to drink at both a low risk level and frequently would increase. A perceived advantage associated with binge drinking was that engagement in such drinking would allow a woman to have fun.

In contrast, both phases of the current research, revealed a range of barriers to drinking. Mostly, these barriers (control beliefs) related to health issues, feeling uncomfortable (e.g., discomfort with the loss of control that comes with inebriation) and short term side effects of alcohol use (e.g., hangovers). Overall, the consistency in findings, across both Study 2's interview data and Study 3's critical beliefs analyses, demonstrated increased support for the qualitative findings through examination of these constructs on a larger more representative sample (i.e., Study 3). Feeling uncomfortable was perceived as a barrier (control belief) to binge drinking for young women and the short term effects such as hangovers were perceived costs (behavioural belief) and barriers (control belief) to binge drink intentions for women in all age groups.

Based on such findings, there may be value in public education messages aiming to emphasise these barriers and disadvantages of short term health effects and feelings of discomfort and, in particular, ways in which individuals may avoid such effects from occurring. Previous research has indicated the importance of targeting cognitions, such as the negative perceptions outlined above, in the success of message persuasiveness (Lewis, Watson, & White, 2010, 2013). Additionally, such campaigns could stress that regular short-term harms can also bring exposure to life-time health-related harms, especially for women (Berstad, Ma, Bernstein, & Ursin, 2008; NHMRC, 2009).

11.4.1.2 Self-identity

Findings from the interview data in Study 2 highlighted the importance of self-identity and, in particular, identifying oneself as a drinker. The degree to which women identified with drinking seemed related to their attitudes towards drinking and drunkenness, and also influenced their perceptions of others' drinking. There were additional labels associated with the need to drink to have, or be, fun (e.g., "party girl" or "nana"). Yet, the definition of a "drinker" was inconsistent across individuals and appeared to not only influence their attitudes,

but be reflective of their attitudes. The interview findings were consistent with concepts of self-identity, social identity and normative influence (Fekadu & Kraft, 2001; Terry et al., 1999).

Self-identity has been shown to play an important role in addictive behaviours (Lindgren et al., 2012; Young, 2011) and thus was used to extend the utility of the standard TPB (Chapter 9).

The extended TPB analysis provided further support for the role of self-identity as a predictor of intentions to binge drink, as well as actual engagement in binge drinking. Self-identity as a significant predictor of behaviour is contrary to the predictions of the TPB (Ajzen, 1991) which maintain that intentions and PBC are the only direct predictors of behaviour. This relationship contributes to discussions in the literature regarding the TPB's intention-behaviour gap (Godin et al., 2005; Sheeran, 2002).

The inconsistent defining of 'drinkers' (as a function of drinking behaviour), was also indicated as the TPB analysis findings revealed that self-identity was a predictor of intentions to binge drink but not frequent drink. A further focus on self-identity, then, would be required to expand the definition of a 'drinker' to incorporate those women who drink more than five days per week, but do not identify themselves as 'drinkers'. Expanding the definition of 'drinker' and raising awareness of the harms associated with such drinking behaviours (both binge and frequent) could raise women's awareness that: it is not only binge drinking that exposes one to health-related harms; and the label of being "a drinker" could be appropriate even if not binge drinking and that such labels may affect one's behaviours.

11.4.1.3 Implicit social acceptance and awareness

A consistent finding across both Phase 1 and 2 of the research programme, related to the influence of the psychosocial factor of awareness on women's drinking. However, in defining and operationalising awareness, the construct appeared to evolve across the systems of influence (i.e., from cultural to psychosocial) and thus may be best considered as a multidimensional construct. The interview data in Study 2 best illustrated the three main

dimensions of awareness through the women's discussions of: (1) the implicit social acceptance and prevalence of alcohol in the women's broader culture and most immediate environments, (2) whether women were aware of the prevalence of alcohol in the broader social and cultural contexts that, in turn, (3) affect women's awareness of their own drinking behaviours and whether consumption is a thought-out, more mindful decision.

Hence, the current programme of research findings suggest that implicit acceptance and prevalence of alcohol consumption at a cultural level, affects expectations and normative influences at a microsystem level in women's most immediate environment, to then inform women's awareness with regard to their own drinking behaviours (at an intra-individual level). Cultural and social acceptance of alcohol in the women's lives meant that they displayed various levels of awareness regarding influences and risks around alcohol consumption. In line with "the normalization of substance use" theory (Measham & Shiner, 2009), the women's accounts showed how alcohol consumption could be reaffirmed and unquestioned in many contexts, and may often be considered as a part of normal adult development and socialisation.

Phase 1 findings showed alcohol-related influences at a more macroscopic level that were implicit, embedded, and to a large degree, less noticed (e.g., media and alcohol marketing). In contrast, women displayed various levels of awareness with regard to their own drinking behaviour and ranged from drinking being an unquestioned automatic behaviour to being a more deliberate conscious choice. The interview data in Study 2 highlighted factors that could alter one's awareness, such as a change in gender role, change in health, or change in one's partner or social group. This finding was further illustrated when women expressed a new level of awareness around their drinking as a result of answering the interview questions or survey questions. Completion of the surveys may have increased participants' awareness and thus influenced their drinking.

Often those women who reported an increased awareness of their own drinking behaviours, also reported awareness of the broader alcohol-related influences. Examination of awareness as an extension of the TPB, revealed that awareness of one's own drinking had a significant negative association with intentions to drink frequently and binge drink.

Conceptualising awareness as the extent to which women were conscious of the way in which they consumed alcohol and therefore, the extent to which engaging in a drinking episode was a thought-out conscious decision is aligned with research on automaticity, impulse control and mindfulness (Fernandez et al., 2010; P. R. Prentice, Wheat, Goulet, & Larkin, 2010). It thus appears to have a relationship, as was found in the interview findings (Study 2), with the aspect of mindfulness defined as “acting with awareness” (Baer et al., 2004; Fernandez et al., 2010). Further, these findings draw upon the interviews wherein women described the need for mindfulness in order to prevent them from slipping into habitual, less controlled drinking.

Bargh's (1994) research discusses automaticity and lack of awareness which, it may be argued, could potentially underlie the drinking described above that leads to incidental drunkenness. There is a potential overlap with attention, awareness and how the lack of these elements can underlie automaticity (Moors & De Houwer, 2006). Consistent with these findings, recent research has demonstrated that mindfulness can reduce automaticity (Kang, Gruber, & Gray, 2013; Lueke & Gibson, 2015) and highlights the orthogonal relationship between the presence of mindfulness and automaticity. In reviewing such literature one can see the value of mindfulness as a potential intervention to help reduce women's habitual excessive drinking.

Findings have been somewhat inconsistent in the literature, with regard to the relationship that mindfulness may have with addictive behaviours, and the subsequent potential as an intervention (Appel & Kim-Appel, 2009; de Lisle, Dowling, & Allen, 2012; Singh et al., 2011). However, mindfulness treatments have been shown to have some efficacy with regard to

the treatment of alcohol and substance use disorders (Black, 2014; Marlatt & Gordon, 1985; Witkiewitz, Marlatt, & Walker, 2005). For instance, mindfulness interventions have been cited as a potential intervention which may be used to counter intrusive thoughts associated with cravings (Kavanagh, Andrade, & May, 2004; Moss, Erskine, Albery, Allen, & Georgiou, 2015; Shipherd & Fordiani, 2014). Slipping into such habitual drinking was an important component of the incidental drunkenness that the women described in the interviews. Use of mindfulness strategies to maintain control of women's drinking behaviours needs further investigation to assess their effectiveness as a harm minimisation tool, especially with regards to incidental drunkenness.

11.4.1.4 Control, Accommodating Alcohol and the Role of Tolerance Levels

The observational findings showed evidence of a transition occurring wherein the women appeared composed and in control of their appearance and behaviours; but then loosened their control over their poise and behaviour to varying degrees with increasing levels of intoxication. This observation related primarily to: composure around the women's appearance and; to changes in interpersonal communication wherein women increased their physical proximity to, and touching of, others. Such changes in interpersonal communication may represent alcohol's role as a social facilitator (Eldridge & Roberts, 2008; Sheehan & Ridge, 2001; Wells et al., 2010). The degree to which the women maintain control varied in the observations in Study 1, in that some women appeared to maintain poise and in control of their behaviours, while others showed signs of relaxing of poise and behaviour (e.g., sitting on the street kerbside, taking off high heeled shoes to walk down the street etc). Such findings were consistent with the interview data (Study 2) in that women differed in their attitudes toward being in control compared with "letting loose". Attitudes toward being "out of control" ranged from totally unacceptable or uncomfortable, to just part of the drinking experience as long as it is appropriate to the context. Similarly, the critical analyses (Study 3, Chapter 10) results

indicated alcohol-related beliefs representative of not being able to control one's behaviour (control belief) and feeling irresponsible (behavioural belief), which were associated with barriers and costs of intentions to binge drink. It is noteworthy, that Phase 2 results indicated that a loss of control was a cost rather than a benefit. In contrast, however, for a number of women in the interviews, a loss of control or "letting loose" was also regarded as a benefit of drinking. Previous research has discussed the relationship between self-control, letting loose and harm reduction (Ettorre, 2004).

The concepts of "controlled loss of control" (Measham & Brain, 2005) and "determined drunkenness" (Measham & Brain, 2005) (wherein strategies are employed in a controlled manner to facilitate getting drunk), can be integrated with the current research findings to provide further support for the concept of "accommodating alcohol" as it is termed in the interview findings (Study 2). That is, in the face of potential barriers which would prevent one's drinking (e.g., short term health effects of alcohol, allergies, cost etc) women sometimes employed strategies that enabled them to still consume alcohol. For instance, women with an allergy to one type of alcohol reported that they may choose a different alcoholic beverage, or those concerned about weight gain drank low calorie alcoholic drinks. One of the most common ways in which the women reported "accommodating alcohol" was through the trial and error of finding the cut-off point. This cut-off point was aligned with exploring women's alcohol tolerance levels so that drinking became an activity that was more aligned with perceived advantages rather than disadvantages. De Visser and Smith (2007) examine such ambivalence with regards to young men's drinking indicating that young men may pursue drinking regardless of possessing various reasons not to drink. This examination highlighted how motives for drinking were often related to motives for not drinking, especially with regards to excessive consumption.

The current programme of research findings underline the importance of alcohol tolerance levels with regard to maintaining control and with avoidance of the 'negative' short term effects of alcohol use. Tolerance levels emerged as a notable influence on attitudes, especially with regard to whether women viewed alcohol consumption positively or negatively. The interview data outlined women's conscious efforts to find a cut-off point as a way of attaining a positive drinking experience rather than one that resulted in hazardous side effects (e.g., loss of control; hangovers). Further evidence of women's pursuits of cut off points, in order to counteract barriers to drinking, transpired in the critical beliefs analyses.

Whilst all age groups saw short term effects of drinking as a barrier (e.g., hangovers), the young women's control belief showed a contrast. That is, they perceived the short term side effects of alcohol (hangover) as a barrier to binge drinking, but having a better tolerance level that alleviated 'suffering' the next day was a facilitator. Such results underline how women may intentionally seek a cut-off point and avoid short term effects, without awareness nor having to address longer term health effects of frequent binge drinking until it may be too late.

Furthermore, this current research indicates that finding a cut-off point, by drawing on previous drinking experience, may be successful in avoiding short term ill-effects. These findings are consistent with existing research that discusses prior drinking experience as being one factor contributing to increased tolerance levels (Fillmore & Weafer, 2012). Overall, finding a cut-off point to avert short term side effects seems to be problematic in terms of the awareness of alcohol-related risks, especially long term harms.

11.4.2 Chronosystem factors - RQ5 – What differences, between age cohorts, can be found in drinking behaviours and the factors influencing them?

11.4.2.1 Younger women's exposure to public drinking compared with older women's unseen private drinking

Pertaining to Research Question 5, it is evident that women's drinking behaviours varied across age cohorts. Based on the observational studies (Study 1), older women tended to be less visible in public drinking venues compared to younger women. In addition, a transition in the type of drinking seems to occur from binge drinking in younger women to more frequent drinking in older women. The differing patterns of women's drinking as a function of age aligns with literature discussing older women's consumption occurring primarily in private venues (DeMarinis et al., 2009; Epstein et al., 2007). This 'private consumption' presents its own set of associated risks with older women having drinking rituals that occur in the privacy of their homes which poses a challenge with respect to detecting, and preventing, problematic drinking (DeMarinis et al., 2009; Epstein et al., 2007). The motivation to vary one's drinking location may be due, based on Phase 1 findings, to normative influences and changing gender roles as impacting upon older women's choice to drink in private venues.

11.4.2.2 Changing intentions – Determined Drunkenness to Incidental Drunkenness

A continuum of alcohol-related intentions was evident in the interview data in Study 2, which appeared to relate to the change in women's drinking from binge to frequent as they aged. The younger women interviewed, described intentions to "let loose" and planned increased consumption by keeping costs low and accessing 'happy hours' or more affordable venues. In comparison, the women reported changes as they got older where the "intention" became about socialising and relaxing, rather than getting drunk. However, sometimes the intention to limit consumption went astray as habits took over and they got unintentionally drunk (i.e., incidental drunkenness). In some instances, women reported becoming distracted

by the social context and only became aware of their level of intoxication when they moved from the drinking environment. Comparing intentions to get drunk, as in determined drunkenness (Measham & Brain, 2005), and accounts of incidental drunkenness, pointed to different intentions and behaviours leading up to the intoxication.

In contrast to determined drunkenness, incidental drunkenness was described by women who did not intentionally set out to get drunk but lacked mindfulness around their consumption and indicators of intoxication. Such Phase 1 findings are important to consider in light of Phase 2 findings that replicate Australian data (AIHW, 2011a) that older women are less likely to binge drink, but more likely to drink frequently. Age was a predictor of frequent and binge drinking, over and above the standard TPB constructs in the extended TPB analysis (Chapter 9). Study 3 also confirmed that younger women are more likely to intend to binge drink while older women are more likely to intend to drink frequently. The integration of such findings calls into question how often older women, in the privacy of their homes are drinking more than the recommended two standard drinks per night (deemed as low risk) (NHMRC, 2009) as a result of frequent incidental drinking episodes. Frequent drinking has its own set of risks as it can: result in higher alcohol tolerance levels which can lead to increased volumes to gain the desired effect (e.g., relaxation); be related to increased likelihood of frequent binge drinking (Paradis et al., 2009); and even in the absence of binge drinking can still represent high volumes of alcohol intake across a lifetime and long term harms (Wetterling et al., 1999).

Incidental drunkenness then, with its change in intention, means that the aim is not necessarily to get drunk but through lack of attention or awareness, one or two drinks can lead to a more habitual form of drinking that can occur through perhaps sharing a bottle of wine with one's partner (as indicated by the interview data). Hence, there appears to be a transition occurring from younger women's binge drinking (determined drunkenness) to older women's drinking (incidental drunkenness). The findings on incidental drunkenness highlight the role of

habit and automaticity rather than determined intention to get drunk. These findings further stress the need to examine the role of awareness of one's drinking behaviours and the interplay with habit and mindfulness, especially "acting with awareness" (Baer et al., 2004; Fernandez et al., 2010). That is, if "drinking with awareness" occurred, then incidental drunkenness would probably not occur. Previous research has shown relationships between mindfulness, acting with awareness, attentional biases and alcohol misuse (Bodenlos et al., 2013; Garland et al., 2012).

11.4.2.3 Factors influencing women's drinking across the age groups

Collectively, findings across the studies in the current programme of research have highlighted several factors that may be influencing women's drinking that change across the life span (e.g., normative influences, change in gender roles, and change in social networks). However, the critical beliefs analysis (Chapter 10), provides detailed findings of a range of beliefs associated with intentions to low risk drink, binge drink and drink frequently that were a function of age. These findings provide insight as to how interventions can target women's beliefs that are influential within a particular age cohort. Comparison of alcohol-related beliefs across the age groups assist in identifying specific age appropriate targets for intervention and more general points of intervention applicable to women of varying ages.

The most noticeable beliefs (both behavioural and control beliefs), that appeared to transcend age, were: those beliefs that related to the gender roles pertaining to family; the short-term effects of alcohol consumption; and alcohol's use as a stress reduction tool. The first factor aligning with women's roles in a family, has been previously discussed as gender roles, but it is noteworthy that for women aged between 25 and 44, the age cohort most likely associated with raising a family, they perceive that even having an occasional drink would interfere with family life. Such findings are consistent with data highlighting the proportion of

women in Australia drinking at risky and high risk levels and which shows a dip in risky drinking behaviours in this age range (ABS, 2009b, 2012a).

The second factor, pertaining to short-term effects of alcohol consumption, is key because it highlights women's concerns over the short term effects of drinking. What is crucial, perhaps then, is the absence of concern regarding the long term effects of drinking. As discussed previously, such findings emphasise the need to raise women's awareness regarding the longer term health effects of drinking. Such preventative measures are crucial in light of this lack of awareness or concern. Prior research has demonstrated the need to address the current generation's risky drinking as the inter-generational increases in alcohol-related health effects are a future public health problem (Gfroerer, Penne, Pemberton, & Folsom, 2003). In part it may be that this lack of awareness is in light of the relative recency of changes in women's drinking (Measham & Ostergaard, 2009; Roche et al., 2008) and drinking contexts (Lindsay, 2006). If one is to draw upon the current findings as well as those that discuss the night-time economy and social norms regarding women's drinking, it is evident that substantial changes have occurred in recent years. To that end, there is an indication that such a cohort effect underlines these influences on contemporary women's drinking.

Taking these results into further consideration, it is noteworthy that women aged 35 to 44 perceived health issues as a barrier to binge drinking, whilst women in the subsequent age cohort (45-54) perceived health issues as a barrier to frequent drinking. These results bring into question the trajectory of drinking behaviours. That is, the women 35 to 44 years of age, the age cohort where the transition from binge to frequent drinking is consolidated, are perceiving health as a barrier to binge drinking. However, by 45 to 54 years of age such health concerns prevent engagement in frequent drinking. In line with women's drinking patterns (ABS, 2012a; AIHW, 2011a), such patterns may indicate the transition from binge drinking to frequent drinking as women's health becomes less tolerant of binge drinking over time. The transition

away from binge drinking is even more evident with the 55 years and older group. This cohort reported no significant benefits or facilitators predicting intentions to binge drink. Instead, barriers such as short term effects of alcohol and behavioural evaluations that binge drinking “makes me feel irresponsible” were evident.

Accommodating alcohol, from binge drinking to frequent drinking, to fit with gender roles or avoid the short-term effects of alcohol can mean that older women (perhaps with children) can still partake in risky drinking. Such risky drinking can be accommodated by: drinking at home, changing the intentions so that drunkenness is not the aim but frequency and incidental drunkenness may be the resulting behaviour; and with the assistance of a determined cut-off point that will alleviate short term effects. Such drinking does not remove all alcohol-related harms, but has its own set of harms, particularly long term health risks, that needs to be addressed in further research. The lack of concern over long term health effects, especially for older women who drink more frequently, that is evident in this research supports the need to increase awareness around frequency and long term effects, particularly for women. It is imperative that women are informed that, even in the perceived absence of short term effects of alcohol, damage may still be occurring.

Finally, the consistent belief across age cohorts with regard to alcohol as a stress management tool indicates the need to address stressors specific to women and promote alternative healthy stress management techniques. Hence, promotion of alternative stress management tools and awareness regarding long term risk exposure needs to be considered in future public health policy.

11.4.3 RQ6. – What, if any, relationships between the salient cultural, social factors and psychosocial factors influencing women’s alcohol consumption?

Throughout this programme of research there was evidence that the systems or levels of influence, and the factors within these systems, are interrelated. For instance, there is evidence

that messages pertaining to women, their role in society and alcohol are carried from cultural systems through to exosystems, then microsystems, and then to influence psychosocial factors occurring within the individual woman and her behaviours around alcohol consumption. The relationships between systems, and the constructs within them, are multidirectional. The interrelatedness of the systems are consistent with the BMHD (Bronfenbrenner & Morris, 2006). Within the current research programme a number of multidirectional interrelationships were identified. Some of the key themes that highlighted the interrelationships between systems are summarised below.

Examination of the critical beliefs analyses (Chapter 10) found that culturally defined gender roles were intricately linked to women's alcohol-related beliefs. Examination of the beliefs underlying women's drinking revealed that interference with family life and being a mother were perceived as being a cost and barrier, respectively, to drinking. For women aged 25 and above, even intentions to low risk drink were underlined by the belief that it would interfere with their family life and younger women also reported that if they didn't have children they would be more likely to intend to binge drink (control belief). Finally, pregnancy and breastfeeding was perceived as a barrier (control belief) to drinking for women aged 25 to 44 years. Hence, the interview findings (Study 2) and critical beliefs findings (Chapter 10) indicated that gender roles associated with mothering and family may have a substantial influence on women's alcohol-related beliefs, playing mostly a deterrent function. Gender roles are discussed as a cultural influence wherein women, in particular, predominantly maintain the responsibility of such family roles (Bergmark, 2004). Such an interplay between gender roles (cultural) and family (microsystem) having an impact on women's beliefs and behaviours (psychosocial) seems then to also be a function of age or stage of life (chronosystem). The relationships between factors highlight the complexity of influences upon women's drinking behaviours.

It appears then, that such roles are playing a deterrent function in reducing women's drinking, but whilst women's roles in society are evolving (Allamani, 2008) so too are women's drinking behaviours. Such findings are consistent with research in a European context (Allamani, 2008; Bergmark, 2004), but is now supported in an Australian context. Consistent with Bronfenbrenner's model (2006), multi-directional influences should be considered and not just a top down approach (i.e., cultural through to psychosocial). Hence, as women fulfil gender roles, they in turn influence (alcohol) industry demands through the adaptation of their drinking behaviours. This current research programme, therefore, supports steps toward gender defined interventions to address problematic drinking and the different ways in which women can engage in risky drinking that still accommodates their gender roles. Thus, addressing the risky behaviours of younger women who are drinking in the public arenas is warranted, but the current findings demonstrate that there are other ways to break the links that lead to women's drinking.

Similarly, multi-directional links were evident when examining cultural influences and the role of alcohol. The top down influence was evident in findings derived from both Study 1 (observations) and Study 3 (critical beliefs analysis) with cultural influences (e.g., gender roles, national sporting events such as the Melbourne Cup) and alcohol being linked through representations in the media (exosystem) and venue marketing (microsystem). These influences then potentially filtered through to women's beliefs that such events 'go hand in hand' with alcohol consumption (as indicated in the critical beliefs analyses).

In Phase 1 of the current research, infrastructure and accessibility to venues (e.g., through public transport or the vicinity of nightclub districts) transpired as an exosystem influence on drinking behaviour. Further substantiation of these influences was apparent in the critical beliefs analyses of Phase 2. Particularly relevant to the impact of infrastructure were the beliefs underlying intentions to binge drink, which involved beliefs regarding increased access to

wineries and wine clubs and venues being within walking distance (exosystem → psychosocial). These facilitators of intentions to binge drink were evident for women in a number of age cohorts (18-24, 35-44, 45-55). Access to wineries and wine clubs also facilitated intentions to low risk drink for women 55 and above, and being at a nice restaurant was significant for women's (aged 18-24, 25-34) intentions to low risk drink. It is noteworthy that the women, aged 35-44 and 44-54, whose intention to low risk drink was not significantly influenced by underlying beliefs regarding drinking contexts (i.e., access to wineries and restaurants). Further, such venue-related critical beliefs were not significantly related to intentions to, nor engagement in frequent drinking. However, having to drive was perceived by younger women (18 -24) as a barrier to intentions to drink frequently. Overall, the importance of infrastructure, "nightclub districts" and transport to such venues underlines a key finding of this research and area of potential intervention at a public policy and legislative level.

One of the predominant factors throughout the existing literature and evident in this current research, was the role that people in women's immediate social contexts played in influencing their drinking behaviours. Peers (and work colleagues) were underscored in the observational and interview data as important influences. Additionally family and partner influence emerged as a substantial factor from the interview data. Evidence of social influence and the network of relationships between other system factors existed. One such example was the way in which venues (microsystem) use social networking sites (exosystem) as a form of alcohol and venue marketing (exosystem), but this usually relies on individuals attending clubs, often with a group of peers (microsystem), possibly for microsystem celebrations such as 21st birthday celebration, and reinforcing beliefs regarding drinking and nights out (e.g., fun night out, determined drunkenness, advantages of drinking) (psychosocial).

Additionally, both phases of this current research demonstrated that social networks and their relationship with drinking can change as a function of age or stage of life (chronosystem).

Hence, the multidirectional relationships with regard to social networks alone, is apparent. Further investigation at the psychosocial level, shows the importance of subjective norms in influencing intentions to frequent and binge drink as was highlighted in Study 3. Further, the critical beliefs analysis also strengthened the importance of this theme as “concerned family/peers” were found to be a normative belief inhibiting drinking and “family commitments”, a barrier to frequent drinking. Such integration of findings emphasises the need to counteract such influences. Informing women of the role that people in their environment play in impacting upon their behaviours and to promote women’s sense of agency could facilitate resistance of risk-inducive factors. Conversely, advocating for women’s social networks to engage in risk-adverse roles could help to inform people’s alcohol-related behaviours and responses.

Phase 1 emphasised the prevalence of alcohol as embedded in celebrations, reinforced by normative expectations, and has therefore filtered through to women’s belief systems. Study 3 (critical beliefs analysis, Chapter 10) findings discuss the importance of holidays and birthdays as facilitators of intentions to low risk drink and binge drink across a number of age groups. Further, in line with the observational findings, the venue as an influencing factor has been supported as women reported being in a nice restaurant as a facilitator of low risk drinking for women up to the age of 34 years old.

In summary, this section has outlined a number of factors from both the BMHD (Bronfenbrenner & Morris, 2006) and an extended TPB (Ajzen, 1991). It is evident that the integration of these models bring with it opportunities for synergy. For instance, Bronfenbrenner and Morris (2006) discussed how they adapted the model to further acknowledge the role of the individual who is at the core of their framework. To that end, the current research project highlights how the individual, conceptualised as the psychosocial influences on women’s drinking, is affected by multiple levels of systems. The synergy

between the two models can be exemplified by the way in which subjective norms and normative beliefs can be influenced by people in a woman's most immediate environment (the microsystem) through to the widest impacts at a cultural level. Similarly, the current research project has indicated that alcohol-related factors across the multiple levels can influence women's alcohol-related attitudes. Further, the current research project explored how cultural influences (macrosystem), alcohol-related media and marketing representations (exosystem) and immediate social groups (microsystem) may have an impact the implicit social acceptance of alcohol and in turn, women's awareness of their drinking and the way in which they identify with alcohol-related identities. Incorporating the extended TPB then, the current research highlighted the role that awareness and self-identity plays in regard to intention and engagement in drinking behaviours.

Finally, the potential synergy between the TPB's (Ajzen, 1991) PBC and Bronfenbrenner's model may be brought to light through Bronfenbrenner and Morris' (2006) discussion of the characteristics of the individual. That is, they argue that one of the three characteristics of an individual, is their bioecological "resources" (including ability, experience, knowledge and skill) (p. 796) and the conceptualisation of these resources appears aligned with the perceived control factors of the TPB (Ajzen, 1991). Overall, then, there appears to be extensive synergy between the two models. Further research is needed however as to how to components of such an integrated model (the TPB within the BMHD) could be quantified and operationalised. Some progress toward the aim of operationalising such intra-individual (psychosocial) processes within the BMHD, has been demonstrated in the study that identifies factors from each level to examine an individual's condom use (Van Horne et al., 2009). Further contributions to theory are summarised in Section 11.5 below.

11.5 Summary of key contributions to theory

This programme of research makes several important contributions to the literature on women's health, substance misuse, and public health research. Identifying key cultural, social, and psychosocial influences on women's drinking (Aim 1), the importance of these influences on the drinking behaviour of women in different age groups (Aim 2) and an understanding of the relationships between the factors (Aim 3), this current research addressed gaps in the literature.

The present research programme addressed the question of what is influencing the recent increases in women's risky drinking. Much of the existing research focussed on alcohol-related problems associated with the general population or with young people. Yet, the literature suggests that drinking is a gendered activity and shows differential patterns of drinking and alcohol-related harms as a function of gender. Such empirical evidence demanded a focus on women's drinking. Hence, this current programme of research adds to, and extends, the existing literature that is focussed on young women's drinking, by examining a greater age range of women.

A second contribution of the research relates to prior research indications that alcohol-related influences originate at a number of levels of varying proximity to the individual. Such findings are consistent with Bronfenbrenner's (2006) model that organises influences on an individual via interrelated systems ranging from the broadest cultural level through to the more proximal intra-individual level. Such an organising framework also takes into account passages of time (chronosystem), which could account for differences in women's drinking as a function of age. Thus, the current research programme contributes to existing theory by examining women's drinking through multiple lenses to provide a comprehensive framework in line with the BMHD.

Subsequently, a third contribution is that the current research programme provides additional support for the utility of the BMHD as an ecological framework with which to understand health behaviours. This contribution is further substantiated by the evidence regarding the interrelatedness of the factors. Additionally, within each of the systems many of the influencing factors can corroborate with previous literature on alcohol consumption or substance use. For example, at a macroscopic level, the current research findings provided additional support for determined drunkenness (Measham & Brain, 2005), but also reframed alcohol-related intentions to accommodate older women's drinking.

Another major contribution of the current research is that it substantiates the explanatory value of the TPB (Ajzen, 1991) in regards to predicting women's intentions to drink across three different behavioural contexts, namely, low risk drinking, drinking frequently, and binge drinking. In utilising a prospective design, the research also provided evidence for the links between intentions and actual (self-reported) drinking behaviours. Prior research had previously upheld the utility of the TPB in understanding intentions and engagement in women's drinking behaviours (Huchting, Lac, & LaBrie, 2008; Murgraff, Abraham, & McDermott, 2007). However, the focus of the Murgraff, Abraham and McDermott's (2007) study was on people in general, but eventuated in separate analyses for men and women as a result of a low male sample size. Huchting, Lac and LaBrie's (2008) research provided a focus on the utility of the TPB in predicting younger women's intentions to, and engagement in drinking behaviours. Further, both of these studies were based solely on a student population to the exclusion of women of a range of ages with a range of drinking behaviours (and their associated intentions).

Finally, the current research programme contributed to the existing empirical evidence regarding the role of self-identity and awareness in addictive behaviours as additional predictors (over and above the standard TPB constructs). Previous research has highlighted the

importance of self-identity as a factor influencing addictive behaviours (Gardner et al., 2012; Lindgren et al., 2013). Findings from the current research programme provide support for such previous evidence and also raise the questions with regard to the subjective nature of self-identity and its relationship with frequent drinking. While the current research programme brought to light the importance of awareness with regard to women's drinking, it also indicated that awareness could be multi-dimensional. However, at the most proximal level, the psychosocial, the construct of awareness seemed akin to previous empirical evidence conceptualising awareness in line with: the mindfulness construct of "acting with awareness" (Baer et al., 2004; Fernandez et al., 2010); and one that contrasts with automaticity (Bargh, 1994; Ostafin & Marlatt, 2008). Hence, the current research findings add to this research by suggesting a possible moderation of the construct, as it is found in women's drinking.

11.6 Implications for practice

The findings of the current research have several significant implications for prevention and early intervention of women's risky drinking behaviours. Most importantly, the implications inform potential interventions aimed, not only at an individual level, but at various systems or levels of influence that promote women's alcohol consumption. The information presented in this section outlines how meeting the current research aims has facilitated an understanding of ways to target interventions in the most effective manner for those women, of all ages, who are at risk of alcohol-related harms. Theoretically informed interventions, such as TPB-based interventions, have been valuable across health behaviours (Ajzen, 2014; French & Cooke, 2012). As such, the current research programme's findings, particularly the TPB studies (Study 3), have identified motivating factors influencing women's drinking and therefore offered much insight into potential target information for interventions.

11.6.1 Implications as a result of identifying key cultural, social and psychosocial factors influencing women's drinking across a range of ages

Through identifying key cultural, social and psychosocial factors influencing women's drinking across a range of ages, a holistic understanding of the influences on women's drinking allows targeted interventions with maximum effect. The practical implications are summarised below with regard to each of these levels of influence.

Firstly, operating at the broadest level, increased awareness is warranted to highlight that drinking is not necessarily aligned with being Australian. It is recommended that public education campaigns promote a healthier alternative to the current notions of national identity that undermines the importance of alcohol. Further, public health messages need to recognise and incorporate a wider range of representations when it comes to people drinking. Targeting younger women drinking in the public arena needs to be continued, but there is also a need to extend campaigns to target older women's risky drinking in the private arena. Interventions at both the broader public health level and the more proximal individual levels need to recognise and address how alcohol interacts with women's gender roles and ways in which women may accommodate alcohol so as to not interfere with these roles. Ultimately, there is a need to bring to light the ways in which alcohol is represented at a cultural level and make the expectations or cultural norms around drinking practices more overt. In this way, women have more freedom to question and challenge that which is currently so socially implicitly acceptable.

Secondly, at the exosystem level, considering the impact that legislation, alcohol marketing and infrastructure can have upon women's drinking; further research and examination of these influences are needed. Debates regarding licensing laws and opening hours (Manton, Room, Giorgi, & Thorn, 2014; Thorn, 2014) have been occurring. Further evidence-based research is needed in order to consolidate best practice with regard to the extent to which alcohol-related legislation, alcohol marketing and infrastructure affects women's

drinking behaviours. The current research underscored the importance of: legislation with regard to drink driving laws and the accessibility of alcohol; the proliferation of alcohol advertising and marketing that is so embedded in the Australian environment and not just at drinking venues; and the role that infrastructure plays in making alcohol accessible in nightclub districts. Addressing such areas of potential intervention is complex, but is warranted. It could be pertinent to consider the shift in cultural attitudes toward smoking and how that has impacted upon legislation, marketing and in turn, people's awareness with regard to smoking. Thus, it could be sound practice to learn from the pioneering interventions that have occurred at these levels in reducing tobacco use.

Thirdly, at the microsystem level, focussing on the physical environment and marketing that occurs within drinking venues could mitigate alcohol-related harms in the public arena. Simple adaptations to the environment and stricter controls on alcohol marketing could provide much needed space from the intoxicating mood of many venues to allow patrons to assess their levels of inebriation and make more objective plans with regard to subsequent drinking behaviours. Additionally, factors identified at the microsystem level demand a need to target social networks in women's lives that play risk-inducive roles. Whilst alcohol-related peer influence is well researched (Fletcher, 2012; Valente et al., 2007) the current research calls for interventions to be extended to a wider variety of women's social networks to include family, partners and work colleagues, and not just peers. The current research proposes that public education campaigns are needed to raise awareness with regard to lowering the impact of such influences. Ideally, campaign objectives would be threefold: 1) targeting those people in women's lives who play the risk-inducive roles so that they gain a greater understanding as to the impact that their alcohol-related messages (e.g., through labelling or cajoling) have; 2) aiming at women to increase their sense of agency in recognising and resisting such social influences; and 3) encouraging people in women's lives who play the risk-averse roles to

continue to do so and to provide them with supporting strategies (e.g., “a time to go home” strategy or a “time for a glass of water instead” campaign).

11.6.2 Implications as a result of gaining an understanding of the relationships between influencing factors and systems

The current research findings have demonstrated the complexity of examining influences upon women's drinking in that, the influences appear to be inextricably linked. A network of relationships exist that show influencing factors originating from a range of systems in the woman's environment, which affect her alcohol-related psychological processes to inform her drinking behaviour. Hence, while the current research programme indicated an emphasis is needed on more proximal factors, in line with the inductive evidence (Phase 1), it stands to reason that the way in which the factors are linked demand a more holistic approach. Focussing interventions at the more proximal influences, such as microsystem and psychosocial factors, may be highly effective. However, ignoring the broader context in which women operate denies the evidence that these proximal influences are all embedded in larger social and cultural systems that largely support alcohol consumption and thus has an impact on women's drinking.

One of the most important themes that stress the importance of these relationships is the way in which alcohol consumption is so engrained in our Australian culture and our cultural celebrations, that women are often not aware of such influences. In turn, there is such implicit social acceptance of drinking behaviours in Australia that women often take their own drinking behaviours for granted, lacking awareness as to what influences them, and how often they are engaged in and often become an unquestioned part of life. It was evident when examining all systems of influence in this current research programme that there is a need to increase awareness at all levels of influence. Overall, the findings suggest that a multi-pronged targeting

of factors (across systems) could maximise prevention and early intervention of women's risky drinking.

11.6.3 Implications as a result of comparing the importance of influences on the drinking behaviour of women in different age groups

Across both phases of this current research there was evidence that women's drinking changes with age or stage of life. Study 1 highlighted the absence of older women in the public drinking arena, and yet, we know that women aged 35 to 54 years are also drinking at risky levels that match their younger counterparts (ABS, 2009c, 2012a). Such findings substantiate the need to target women's drinking differentially according to age and stage of life. As previously discussed, different representations of women drinking that take into account: older women; frequent drinking; life-time harms and; drinking in private arenas; are lacking.

Such representations in public harm minimisation campaigns could possibly raise awareness that it is not just younger women who binge drink that are at risk. If older women have an increased likelihood of frequent drinking in the privacy of their homes there may be less opportunity for detection of drinking problems (Epstein et al., 2007). As such, older women are thus exposed to a different set of risks compared to their younger counterparts, who may be more visible in public spaces where acute alcohol risk is more pertinent (Epstein et al., 2007).

Further, the critical beliefs analyses identified how many of the broader influences translate into women's alcohol-related beliefs. It was evident that some beliefs were prevalent across age groups (e.g., drinking as a stress management tool, avoidance of short term side effects), but many were salient as a function of age. Such results bring to the fore the importance of tailoring interventions according to age cohort. For instance, facilitators of binge drinking were more apparent in the younger cohorts, and noticeably less in the older cohorts. The onset of health-related barriers from the age of 35 years was also marked. Identification of

such facilitators and barriers occurring within specific age cohorts emphasise varying points of intervention and the age of the population that should be targeted.

11.7 Strengths and limitations

This programme of research represents a substantial body of work that offers important theoretical and practical contributions to alcohol-related harm reduction. The major strength of the current research lies in the integration of two theories in order to provide a comprehensive picture of the influences on women's drinking across a range of age cohorts. Thus, rather than examining only younger women's drinking from a single level of influence, the current research explored how multiple systems of influence impacted upon women's drinking. A further strength was that the programme of research investigated a broad range of ages that ranged from 18 years to 87 years. This broad range of ages facilitated representation of a spectrum of age cohorts. These strengths, especially integrated, were unique additions to the literature as they provided knowledge about a previously under-researched area of alcohol consumption and established a platform upon which to target interventions with some specificity.

The mixed methods design, was not only an appropriate fit for the aims of the research programme, but was a strength with regard to the emerging trends in women's drinking and resultant paucity of knowledge. That is, the inductive phase and initial ethnographic investigation was compatible with the recently emerging trends amongst a particular population within a cultural context. Exploring women's drinking from a ground up approach afforded the research the capacity to be "open" to any themes that transpired. Denzin and Lincoln (2008) espouse the capacity of qualitative research as providing knowledge when little is known about a particular topic. Bronfenbrenner's model (2006) was also cogent as a guiding framework that did not limit the themes that arose, but assisted with the organisation and positioning of the influencing factors. Drawing upon Phase 1, the deductive phase (Phase 2) facilitated a more

focussed examination of the psychosocial influences using a well-established psychological theory (the TPB). The research design provided a breadth and a depth of knowledge of factors influencing women's drinking.

The use of a robust theoretical model such as the TPB (Ajzen, 1991) was also a strength of the current research programme. The TPB, as an established model of health decision-making, was particularly relevant to investigating psychosocial processes underlying women's drinking behaviours. Specifically, the TPB provided a theoretical focus that was previously lacking in the literature with regard to women's drinking. With its capacity as a model of behavioural change, use of the TPB was an additional strength that pinpointed potential points of intervention.

Finally, the sample size in Phase 2 of the research was substantial ($N = 1069$) allowing a higher level of confidence when interpreting the analyses and allowed greater generalisability. Overall, with broader age ranges and an increased sample size the generalisability of the results to a range of women with a range of drinking behaviours was enhanced.

Notwithstanding the aforementioned strengths, acknowledgement of the limitations of the current research programme is needed. Although the aim of the first phase of this research project was conducted with the aim of being inductive, there could be some concern that looking at it through the lens of Bronfenbrenner's model may lead to an underrepresentation of other potentially applicable frameworks.

Additionally, self-report data brings with it some inherent limitations. Reliance on self-report data across two of the studies is potentially biased with the possibility of social desirability bias (Crowne & Marlowe, 1960). While drinking appears to be socially accepted to a large degree, a certain amount of stigma associated with excessive drinking exists (Corrigan et al., 2005; Glass et al., 2013; Gray, 2010). Hence, those women who may drink to a larger degree may have underreported their drinking. Underreporting of quantities of alcohol

consumed is a common occurrence in such self-reported data (Rundle-Thiele, 2009; Stockwell et al., 2004). Self-report methods also rely on accurate recall of information and thus, the follow up survey that measured women's "actual" drinking behaviours was dependent on women accurately recalling their actual consumption within a previous two week period. However, the two week follow-up was considered the most appropriate timeframe to facilitate the most accurate and generalisable data generation. Additionally, Study 1 did not rely upon self-report data and thus makes use of a more objective form of data collection (Rundle-Thiele, 2009).

Another limitation of the research programme lies in the cross-sectional design of the research. Whilst this design had a number of benefits as outlined above, the results of the current research were limited to inferences regarding individual age cohorts. Investigation of women's drinking across the lifespan and examination of changes across time or life event would be enhanced by a longitudinal design.

Finally, as evidenced in the discussion of chronosystem influences (Section 11.4.1) in some instances, it was difficult to delineate and assign influences to just one system within the BMHD (Bronfenbrenner & Morris, 2006). This issue however, is consistent with the framework, in which Bronfenbrenner (2006) stipulates that human complexity is somewhat underlined in the way in which the bioecological systems and factors interrelate and overlap.

The limitations discussed in this section, then, pave the way for potential future research that complements this current programme. Suggestions for future research are outlined in the following section.

11.8 Future research directions

As discussed previously, the current programme of research utilised a cross-sectional design to further knowledge of women's drinking across a range of age groups. It highlighted key differences between alcohol-related influences and drinking behaviours as a function of

age. To gain a greater understanding of how such differences may evolve across a woman's life span, or as a result of a life event, further research using a longitudinal design would enhance the current research findings. In line with this suggestion, future research focussed on intergenerational differences could reflect upon: potential changes in cultural influences or gender roles, and assess potential parental influences on daughters.

The current research programme also emphasises the exposure to risk and potential under-detection of risky drinking that may be occurring for older women drinking in the private sphere. It also identifies the occurrence of incidental drunkenness that is relevant to older women. Hence, further research is warranted on older women, specifically, further investigation into such private arenas of drinking, and ideally, utilising a mixture of self-report and other more objective measures.

Empirical evidence regarding the association of self-identity with addictive behaviours exists and was added to by the current research programme. However, the current programme of research findings demonstrated a significant link between self-identity (as a drinker) and binge drinking, but not between self-identity and frequent drinking. Such findings raise questions pertaining to the way in which women self-identify as a function of drinking alcohol at least five days in one week. If frequent drinking means that a woman does not identify as a drinker, what implications does this have for self-assessment of risk associated with frequent drinking and does this belie the potential for rationalisation of their behaviour (Ajzen & Fishbein, 1977; Tsang, 2002), especially in the face of the societal acceptance of drinking?

Future research is also recommended to investigate the ways in which women, as well as men or young people, accommodate alcohol. Specifically, the importance of ascertaining a cut-off point so that alcohol can be consumed but with a negating of the short-term harms could be examined. Exploration of accommodation of alcohol and cut-off points would potentially add to our knowledge about how such behaviours facilitate drinking. For instance, the current

research findings (particularly the interview findings) suggested that those women who were able to find a cut-off point and accommodate alcohol, were more likely to hold positive attitudes toward drinking rather than acknowledging the disadvantages. This finding has implications for potential exposure to harms other than short-term risks.

Additionally, the current research findings highlighted varying dimensions of awareness as a function of system or proximity to the individual. Future research directions could investigate the awareness construct further in order to provide a more accurate conceptualisation. As such, defining awareness, to this regard, calls for an examination of the relationship between the broader concept of “implicit social acceptance” of alcohol, and awareness that is more consistent with the psychosocial construct of mindfulness or “acting with awareness” (Baer et al., 2004; Fernandez et al., 2010).

Finally, the current programme of research suggested a number of practical implications in the form of interventions targeting the systems of influence. These interventions comprised of public education campaigns, policy/ legislative reviews and individual interventions. While this research has suggested such interventions, future research would be required to evaluate the efficacy of such interventions.

11.9 Conclusion

The current dissertation outlined recent trends showing the increase in women's risky drinking that is occurring across several age groups. It provided a review of existing literature that demonstrated a need to examine women's drinking across age groups and across systems of influence. As a result, the programme of research was designed utilising a mixed methods approach. The mixed methods approach commenced with an inductive approach, in order to explore women's drinking from their perspectives and was guided by the BMHD (Bronfenbrenner & Morris, 2006) to facilitate examination of women's drinking through a broad lens. Subsequently, the deductive phase focussed in on the intra-individual psychosocial

predictors with the TPB providing a narrower lens with which to examine the most proximal predictors of women's drinking behaviours.

In attending to the emerging problem of women's drinking and addressing the research gaps, this research is unique in a number of ways. It identified key factors across multiple systems that influence women's drinking, and highlighted the salience of these factors as a function of age. Further, it revealed multi-directional relationships between factors and systems that signify how influences on women's drinking are inextricably linked. The findings contributed to theory by showing the utility of the BMHD (Bronfenbrenner & Morris, 2006) as a broad framework with which to examine influences on women's drinking behaviours. Additionally, the well-established TPB (Ajzen, 1991) was shown to be a useful model for understanding the psychosocial determinants of women's drinking, not only in regards to intentions but, also behaviour (through the use of a prospective design including measurement of behaviour). Together, the broader lens of the BMHD and the more specific focus/lens of the TPB, offered a most complementary theoretical framework with which to guide this investigation. As well as contributing to theory, this programme of research has implications for policy and practice particularly in regards to informing interventions which may assist to reduce problematic drinking by women.

Overall, the findings suggest the importance of a comprehensive targeting of interventions to reduce alcohol-related harms. Whilst the results attest to there being multiple systems of influence, findings from Phase 1 of the research suggested the need for a greater focus on the more proximal systems, predominantly the psychosocial factors affecting women's alcohol consumption. Influenced by the broader systems, these psychosocial factors are those psychological processes that operate within the individual to affect her drinking behaviours. Correspondingly, more proximal interventions (e.g., those aimed at an individual's underlying beliefs) could be of benefit in reducing women's drinking. That said, the influence

of factors across systems which the programme of research highlighted does also suggest a need for a multipronged approach to intervention which targets factors in all systems of influence (e.g., public education campaigns, legislative reforms). Further, the results call for a tailoring of interventions that are not only gender specific, but that take into account the relationship between age (or stage of life) and alcohol consumption.

Hence, just as this programme of research was effective in its examination of women's drinking through dual lenses, the results indicate a need to target prevention and intervention through similar lenses to focus on all systems of influence. Targeting interventions at all systems makes for a comprehensive strategy to prevent future alcohol-related problems or facilitate early intervention for women at risk of alcohol-related harms. Such crucial interventions are needed to curb women's drinking in light of the increased trends in risky drinking that is occurring. The extent to which this risky drinking contributes to alcohol-related harms, especially for women, is a public health issue that needs to be addressed.

References

- Aarons, G. A., Goldman, M. S., Greenbaum, P. E., & Coover, M. D. (2003). Alcohol expectancies:: Integrating cognitive science and psychometric approaches. *Addictive Behaviors*, 28(5), 947-961. doi: 10.1016/s0306-4603(01)00282-9
- Aarts, H., & Dijksterhuis, A. (2003). The silence of the library: Environment, situational norm, and social behavior. *Journal of Personality and Social Psychology*, 84(1), 18-28. doi: 10.1037/0022-3514.84.1.18
- Abbey, A., Zawacki, T., Buck, P. O., Clinton, A. M., & McAuslan, P. (2001). Alcohol and sexual assault. *Alcohol Research and Health*, 25(1), 43-51.
- ABS. (2006). *Alcohol Consumption in Australia: A Snapshot, 2004-05*. Canberra: Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4832.0.55.001/>.
- ABS. (2009a). *3301.0 - Births, Australia, 2008* Canberra: Retrieved from <http://abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3301.0Contents2008?opendocument&tabname=Summary&prodno=3301.0&issue=2008&num=&view=>.
- ABS. (2009b). *ABS Australian Social Trends_ December 2009*. Canberra: Australian Bureau of Statistics.
- ABS. (2009c). *National Health Survey: Summary of Results 2007-2008*. Canberra: Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Products/4364.0~2007-08~Main+Features~Risk+Factors?OpenDocument>.
- ABS. (2011). *Fifty years of labour force: Now and then*: Australian Bureau of Statistics.
- ABS. (2012a). *4125.0 Gender Indicators*. Canberra: Australian Bureau of Statistics.
- ABS. (2012b). *Registered marital status by age by sex (SA2+) 2011 Census of Population and Housing* (pp.

http://stat.abs.gov.au/Index.aspx?DataSetCode=ABS_CENSUS2011_T2004).

Canberra: ACT: Australian Bureau of Statistics.

ABS. (2014). Education and Work, Australia, May 2014. In ABS (Ed.), *Education and Work, Australia, May 2014* (pp. Table 9). Canberra: ACT: Australian Bureau of Statistics.

Adler, P. A., & Adler, P. (1987). *Membership roles in field research* (Vol. 6.). Newbury Park, Calif: Sage Publications.

Adler, P. A., & Adler, P. (1994). Observational techniques. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 377-392). Thousand Oaks, CA: Sage Publications.

AIHW. (2008). 2007 National Drug Strategy Household Survey. Canberra.

AIHW. (2011a). *2010 National Drug Strategy Household Survey*. (PHE 145). Canberra.

AIHW. (2011b). 2010 National Drug Strategy Household Survey - Detailed Findings.
Canberra: The Australian Institute of Health and Welfare.

AIHW. (2014). NDSHS 2013: Alcohol use (NDSHS 2013 key findings) (A. Australian Institute of Health and Welfare, Trans.). Canberra: AIHW.

AIWH. (2005). Statistics on Drug Use in Australia 2004 (T. A. I. o. H. a. Welfare, Trans.).
Canberra.

AIWH. (2008). 2007 National Drug Strategy Household Survey - Detailed Findings (T. A. I. o. H. a. Welfare, Trans.). Canberra: The Australian Institute of Health and Welfare.

Ajzen, I. Constructing a Theory of Planned Behavior questionnaire. 2013, from
<http://people.umass.edu/aizen/pdf/tpb.measurement.pdf>

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: from cognition to behavior*. Berlin: Springer-Verlag.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32, 665-683.
- Ajzen, I. (2006). Icek Ajzen. 2010, from <http://www.people.umass.edu/ajzen/tpb.diag.html>
- Ajzen, I. (2007). Behavioural interventions based on the Theory of Planned Behavior. from <http://www.people.umass.edu/ajzen/pdf/tpb.intervention.pdf>
- Ajzen, I. (2012). Constructing a Theory of Planned Behavior Questionnaire. 2012, from <http://people.umass.edu/ajzen/pdf/tpb.measurement.pdf>
- Ajzen, I. (2014). The theory of planned behaviour is alive and well, and not ready to retire: A commentary on Sniehotta, Priesseu, and Araújo-Soares. *Health Psychology Review*, 1-7. doi: 10.1080/17437199.2014.883474
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888 - 918.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I., & Sheikh, S. (2013). Action versus inaction: Anticipated affect in the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 43(1), 155-162. doi: 10.1111/j.1559-1816.2012.00989.x
- Allamani, A. (2008). Alcoholic Beverages, Gender and European Cultures. *Substance Use & Misuse*, 43(8-9), 1088-1097. doi: doi:10.1080/10826080801913438
- Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality Progress*, 40(7), 64-65.
- Altamirano-Jimenez, I. *Going native. Encyclopedia of case study research*. Thousand Oaks, CA: SAGE Publications, Inc.
- Andrews, J. A., Tildesley, E., Hops, H., & Li, F. (2002). The influence of peers on young adult substance use. *Health Psychology*, 21(4), 349-357.

- Angrosino, M. (2007). *Doing Ethnographic and Observational Research*. London, UK: SAGE Publications Ltd.
- Anonymous. (2010). FED:Punters bet big on the Cup, p. n/a. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/761394933?accountid=13380>
- Appel, J., & Kim-Appel, D. (2009). Mindfulness: Implications for substance abuse and addiction. *International Journal of Mental Health and Addiction*, 7(4), 506-512. doi: 10.1007/s11469-009-9199-z
- Armitage, C. J. (2007). Efficacy of a brief worksite intervention to reduce smoking: The roles of behavioral and implementation intentions. *Journal of Occupational Health Psychology*, 12(4), 376-390. doi: 10.1037/1076-8998.12.4.376
- Armitage, C. J. (2014). Time to retire the theory of planned behaviour? A commentary on Sniehotta, Pesseau and Araújo-Soares. *Health Psychology Review*, 1-5. doi: 10.1080/17437199.2014.892148
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *The British Journal of Social Psychology*, 40(4), 471.
- Armitage, C. J., Sheeran, P., Conner, M., & Arden, M. A. (2004). Stages of Change or changes of stage? Predicting transitions in Transtheoretical Model Stages in relation to healthy food choice. *Journal of Consulting and Clinical Psychology*, 72(3), 491-499. doi: 10.1037/0022-006x.72.3.491
- Armstrong, K. A., Obst, P. L., Thunstrom, H., Haydon, H. M., & Davey, J. (2010a). *The culture of older women's drinking in Australia*. Paper presented at the The T2010 International Council on Alcohol, Drugs and Traffic Safety Conference, Oslo, Norway.

- Armstrong, K. A., Obst, P. L., Thunstrom, H., Haydon, H. M., & Davey, J. (2010b). *The culture of young women's drinking in Australia*. Paper presented at the The T2010 International Council on Alcohol, Drugs and Traffic Safety Conference, Oslo, Norway.
- Australasian Casino Association. (2009). Gambling compliance: Australian casinos - Responsible gambling initiatives 1999 - 2008 *Australasian Casino Association Research Project*. London: Gambling Compliance.
- Ayers, S., Wagaman, M., Geiger, J., Bermudez-Parsai, M., & Hedberg, E. (2012). Examining school-based bullying interventions using multilevel discrete time hazard modeling. *Prevention Science, 13*(5), 539-550. doi: 10.1007/s11121-012-0280-7
- Ayoola, A. B., Nettleman, M., & Brewer, J. (2007). Reasons for Unprotected Intercourse in Adult Women. *Journal of Women's Health (15409996), 16*(3), 302-310. doi: 10.1089/jwh.2007.0210
- Babor, T., Higgins-Biddle, F., Saunders, J. B., & Monteiro, M. G. (2001). The Alcohol Use Disorders Identification Test: Guidelines for use in primary care. Geneva: WHO (World Health Organisation).
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment, 11*(3), 191-206. doi: 10.1177/1073191104268029
- Baker, L. M. (2006). Observation: A complex research method. *Library Trends, 55*(1), 171-189.
- Ballakoor, K., Ray, R., Dube, S., Jain, R., Vaswani, M., & Dhawan, A. (2001). An experimental study of tolerance among alcohol dependent individuals. *The Indian journal of medical research, 113*(Journal Article), 26.

- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (2 ed., Vol. 1, pp. 1-40). Hillsdale, NJ: Erlbaum.
- Bartlett, O. (2013). Under the influence? The Alcohol Industry's Involvement in the Implementation of Advertising Bans. *European Journal of Risk Regulation : EJRR*, 4(3), 383.
- Beasley, J. M., Coronado, G. D., Livaudais, J., Angeles-Llerenas, A., Ortega-Olvera, C., Romieu, I., . . . Torres-Mejía, G. (2010). Alcohol and risk of breast cancer in Mexican women. *Cancer Causes & Control*, 21(6), 863-870. doi: 10.1007/s10552-010-9513-x
- Beckerleg, S., & Hundt, G. L. (2004). Reflections on fieldwork among Kenyan heroin users. In L. Hume & J. Mulcock (Eds.), *Anthropologists in the field: Cases in participant observation* (pp. 127-139). New York: Columbia University Press.
- Bergmark, K. H. (2004). Gender roles, family, and drinking: Women at the crossroad of drinking cultures. *Journal of Family History*, 29, 293-307. doi: 10.1177/0363199004266906
- Bergstrom, R. L., Lewis, M. A., Neighbors, C., & Oster-Aaland, L. (2006). Event- and context-specific normative misperceptions and high-risk drinking: 21st birthday celebrations and football tailgating *. *Journal of Studies on Alcohol*, 67(2), 282+.
- Berstad, P., Ma, H., Bernstein, L., & Ursin, G. (2008). Alcohol intake and breast cancer risk among young women. *Breast Cancer Research and Treatment*, 108(1), 113-120. doi: 10.1007/s10549-007-9578-8
- Beyers, J. M., Toumbourou, J. W., Catalano, R. F., Arthur, M. W., & Hawkins, J. D. (2004). A cross-national comparison of risk and protective factors for adolescent substance use: The United States and Australia. *Journal of Adolescent Health*, 35, 3-16. doi: 10.1016/j.jadohealth.2003.08.015

- Bhatia, S. (2007). Rethinking culture and identity in psychology: Towards a transnational cultural psychology. *Journal of Theoretical and Philosophical Psychology*, 27(2), 301-321. doi: 10.1037/h0091298
- Bissonauth, V., Shatenstein, B., Fafard, E., Maugard, C., Robidoux, A., Narod, S., & Ghadirian, P. (2009). Risk of breast cancer among French-Canadian women, noncarriers of more frequent BRCA1/2 mutations and consumption of total energy, coffee, and alcohol. *Breast Journal*, 15, S63-71.
- Black, D. S. (2014). Mindfulness-based interventions: An antidote to suffering in the context of substance use, misuse, and addiction. *Substance Use & Misuse*, 49(5), 487-491. doi: 10.3109/10826084.2014.860749
- Blanchard, C. M., Courneya, K. S., Rodgers, W. M., Daub, B., & Knapik, G. (2002). Determinants of exercise intention and behavior during and after phase 2 cardiac rehabilitation: An application of the theory of planned behavior. *Rehabilitation Psychology*, 47(3), 308-323. doi: 10.1037/0090-5550.47.3.308
- Bloomfield, K., Gmel, G., & Wilsnack, S. (2006). Introduction to special issue 'Gender, Culture and Alcohol Problems: a Multi-national Study'. *Alcohol And Alcoholism (Oxford, Oxfordshire). Supplement*, 41(1), i3-i7.
- Bodenlos, J. S., Noonan, M., & Wells, S. Y. (2013). Mindfulness and alcohol problems in college students: The mediating effects of stress. *Journal of American College Health*, 61(6), 371-378. doi: 10.1080/07448481.2013.805714
- Boeije, H. (2002). A purposeful approach to the Constant Comparative Method in the analysis of qualitative interviews. *Quality & Quantity*, 36(4), 391-409. doi: 10.1023/a:1020909529486
- Bogart, L. M., & Delahanty, D. L. (2008). Psychosocial models. In T. J. Boll, R. G. Frank, A. Baum & J. L. Wallander (Eds.), *Handbook of clinical health psychology: Volume 3*,

- Models and perspectives in health psychology*. (Vol. 3, pp. 201-248). Washington, DC: American Psychological Association.
- Bogg, T., & Finn, P. R. (2009). An ecologically based model of alcohol-consumption decision making: Evidence for the discriminative and predictive role of contextual reward and punishment information. *Journal of Studies on Alcohol and Drugs*, 70(3), 446-457.
- Boman, Å., Bohlin, M., Eklöf, M., Forsander, G., & Törner, M. (2015). Conceptions of diabetes and diabetes care in young people with minority backgrounds. *Qualitative Health Research*, 25(1), 5-15. doi: 10.1177/1049732314549358
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. doi: 10.3316/QRJ0902027
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for Health Services Research: Developing taxonomy, themes, and theory. *Health Services Research*, 42(4), 1758-1772. doi: 10.1111/j.1475-6773.2006.00684.x
- Brain, K. (2000). *Youth, alcohol and the emergence of the post-modern alcohol order*. IAS Occasional Paper. Occasional paper. Institute of Alcohol Studies. Cambridge. Retrieved from <http://www.ias.org.uk/resources/papers/brainpaper.pdf>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brister, H. A., Wetherill, R. R., & Fromme, K. (2010). Anticipated versus actual alcohol consumption during 21st birthday celebrations. *Journal of Studies on Alcohol and Drugs*, 71(2), 180.
- Brodmerkel, S., & Carah, N. (2013). Alcohol brands on Facebook: The challenges of regulating brands on social media. *Journal of Public Affairs*, 13(3), 272-281. doi: 10.1002/pa.1466

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531. doi: 10.1037/0003-066x.32.7.513
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34(10), 844-850. doi: 10.1037/0003-066x.34.10.844
- Bronfenbrenner, U. (1986). Recent advances in research on the ecology of human development. In R. K. Silbereisen, K. Eyferth & G. Rudinger (Eds.), *Development as action in context: Problem behavior and normal youth development* (pp. 286-309). New York: Springer-Verlag.
- Bronfenbrenner, U. (1994). Ecological models of human development *International encyclopedia of education* (2 ed., Vol. 3, pp. 1643-1647). Oxford: Elsevier Sciences, Ltd.
- Bronfenbrenner, U., & Crouter, A. C. (1983). The evolution of environmental models in developmental research. In W. Kessen & P. H. Mussen (Eds.), *Handbook of child psychology: Vol. 1. History, theory, and methods*. (4 ed., Vol. 1, pp. 357-414). New York: Wiley.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *The handbook of child psychology* (6th ed., Vol. 1, pp. 793-828). Hoboken, NJ: John Wiley & Sons Inc.
- Budgeon, S. (2014). The dynamics of gender hegemony: Femininities, masculinities and social change. *Sociology*, 48(2), 317-334. doi: 10.1177/0038038513490358
- Buttler, M. (2010, 30/08/2010). Spida Everitt hits out on Twitter after Tuck treated for alleged OD, Sports, *The Courier Mail*. Retrieved from <http://www.heraldsun.com.au/sport/afl/young-hawk-travis-tuck-treated-for-drug-overdose/story-e6frf9jf-1225912060153>

- Cable, N., & Sacker, A. (2008). Typologies of alcohol consumption in adolescence: predictors and adult outcomes. *Alcohol and Alcoholism*, 43(1), 81-90. doi: 10.1093/alcalc/agm146
- Cairns, R. B. (1970). Toward a unified science of development. *Contemporary Psychology*, 15, 214-215.
- Cairns, R. B. (1990). Towards a developmental science (Vol. 1, pp. 42-44): Cambridge University Press.
- Cairns, R. B., & Cairns, B. D. (1994). *Lifelines and risks: Pathways of youth in our time*. London: Harvester Wheatsheaf.
- Calligeros, M. (2010, 22 November, 2010). Gold Coast schoolies loses lustre, *Queensland News*. Retrieved from <http://www.brisbanetimes.com.au/queensland/gold-coast-schoolies-loses-lustre-20101121-182ux.html>
- Carroll, K. M., Connors, G. J., Del Boca, F. K., Mattson, M. E., Randall, C. L., & Roberts, J. S. (1999, 1999/03//). Telescoping of landmark events associated with drinking: A gender comparison. *Journal of Studies on Alcohol*, 60, 252.
- Caviness, C. M., Hatgis, C., Anderson, B. J., Rosengard, C., Kiene, S. M., Friedmann, P. D., & Stein, M. D. (2009). Three brief alcohol screens for detecting hazardous drinking in incarcerated women. *Journal of Studies on Alcohol and Drugs*, 70(1), 50-54.
- Chapman, E. N., & Werner-Wilson, R. J. (2008). Does positive youth development predict adolescent attitudes about sexuality? *Adolescence*, 43(171), 505-523. doi: 10.1023/a:1023056425648
- 10.1037/0033-295x.102.3.458
- Chatterton, P., & Hollands, R. (2002). Theorising urban playscapes: Producing, regulating and consuming youthful nightlife city spaces. *Urban Studies (Routledge)*, 39(1), 95-116. doi: 10.1080/00420980220099096

- Chikritzhs, T. N., Allsop, S. J., Moodie, A. R., & Hall, W. D. (2010). Per capita alcohol consumption in Australia: will the real trend please step forward? *The Medical journal of Australia*, 193(10), 594.
- Christie-Mizell, C. A., & Peralta, R. L. (2009). The gender gap in alcohol consumption during late adolescence and young adulthood: Gendered attitudes and adult roles. *Journal of Health and Social Behavior*, 50(4), 410-426. doi: 10.1177/002214650905000403
- Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4 ed., Vol. 2, pp. 151 - 192). Boston: McGraw-Hill.
- Cleveland, M. J., Hultgren, B., Varvil-Weld, L., Mallett, K. A., Turrissi, R., & Abar, C. C. (2013). Moderation of a parent-based intervention on transitions in drinking: examining the role of normative perceptions and attitudes among high- and low-risk first-year college students. *Alcoholism, clinical and experimental research*, 37(9), 1587-1594. doi: 10.1111/acer.12126
- Collingridge, D. S., & Gantt, E. E. (2008). The quality of qualitative research. *American Journal of Medical Quality*, 23(5), 389-395. doi: 10.1177/1062860608320646
- Collins, S. E., & Carey, K. B. (2007). The theory of planned behavior as a model of heavy episodic drinking among college students. *Psychology of Addictive Behaviors*, 21(4), 498-507. doi: 10.1037/0893-164x.21.4.498
- Connell, R. W. (1995). *Masculinities*. Berkeley: University of California Press.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender and Society*, 19(6), 829-859. doi: 10.1177/0891243205278639
- Conner, M., Warren, R., Close, S., & Sparks, P. (1999). Alcohol consumption and the Theory of Planned Behavior: An examination of the cognitive mediation of past behavior.

- Journal of Applied Social Psychology*, 29(8), 1676-1704. doi: 10.1111/j.1559-1816.1999.tb02046.x
- Conroy, D., & de Visser, R. (2013a). Being a non-drinking student: An interpretative phenomenological analysis. *Psychology & Health*, 29(5), 536-551. doi: 10.1080/08870446.2013.866673
- Conroy, D., & de Visser, R. (2013b). 'Man up!': Discursive constructions of non-drinkers among UK undergraduates. *Journal of Health Psychology*, 18(11), 1432-1444. doi: 10.1177/1359105312463586
- Constantinople, A. (2005). 'Masculinity-femininity: An exception to a famous dictum?'. *Feminism & Psychology*, 15(4), 385-407. doi: 10.1177/0959-353505057611
- Cooke, R., Sniehotta, F., & Schütz, B. (2007). Predicting binge-drinking behaviour using an extended TPB: Examining the impact of anticipated regret and descriptive norms. *Alcohol and alcoholism (Oxford, Oxfordshire)*, 42(2), 84-91. doi: 10.1093/alcalc/agl115
- Cooley, D., Pedersen, S., & Mainsbridge, C. (2014). Assessment of the impact of a workplace intervention to reduce prolonged occupational sitting time. *Qualitative Health Research*, 24(1), 90-101. doi: 10.1177/1049732313513503
- Corbin, W. R., Scott, C., Leeman, R. F., Fucito, L. M., Toll, B. A., & O'Malley, S. S. (2013). Early subjective response and acquired tolerance as predictors of alcohol use and related problems in a clinical sample. *Alcoholism: Clinical and Experimental Research*, 37(3), 490-497. doi: 10.1111/j.1530-0277.2012.01956.x
- Corcoran, J., Franklin, C., & Bennett, P. (2000). Ecological factors associated with adolescent pregnancy and parenting. *Social Work Research*, 24(1), 29-39.
- Corrigan, P. W., Lurie, B. D., Goldman, H. H., Slopen, N., Medasani, K., & Phelan, S. (2005). How adolescents perceive the stigma of mental illness and alcohol abuse. *Psychiatric services (Washington, D.C.)*, 56(5), 544-550. doi: 10.1176/appi.ps.56.5.544

- Corzine, N. M. (2010). Right at home: Freedom and domesticity in the language and imager of beer advertising 1933-1960. *Journal of Social History*, 43(4), 843-866.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35(2), 236-264. doi: 10.1177/0011000006287390
- Crosby, R. A., Salazar, L. F., & DiClemente, R. J. (2013). Ecological approaches in the new public health. In R. J. DiClemente, L. F. Salazar & R. A. Crosby (Eds.), *Health behavior theory for public health: Principles, foundations and applications* (pp. 231-251). Burlington, MA: Jones & Bartlett Learning.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Cui, G. (2000). Advertising of alcoholic beverages in African-American and women's magazines: Implications for health communication. *Howard Journal of Communications*, 11(4), 279-293.
- Cumsille, P. E., Sayer, A. G., & Graham, J. W. (2000). Perceived exposure to peer and adult drinking as predictors of growth in positive alcohol expectancies during adolescence. *Journal of Consulting and Clinical Psychology*, 68(3), 531-536. doi: 10.1037/0022-006x.68.3.531
- Cusack, C. M., & Digance, J. (2009). The Melbourne Cup: Australian identity and secular pilgrimage. *Sport in Society*, 12(7), 876-889. doi: 10.1080/17430430903053109
- Davey, J. D., Davey, T., & Obst, P. L. (2005). Drug and Drink Driving by University Students: An Exploration of the Influence of Attitudes. *Traffic Injury Prevention*, 6(1), 44 - 52.
- David Campari. (2011). Campari Group. from http://www.camparigroup.com/it/press_media/history_communication/campari_html.js

- Davison, W. P. (1983). The third-person effect in communication. *The Public Opinion Quarterly*, 47(1), 1-15. doi: 10.2307/2748702
- Dawson, D. A., Grant, B. F., Stinson, F. S., & Zhou, Y. (2005). Effectiveness of the derived Alcohol Use Disorders Identification Test (AUDIT-C) in screening for alcohol use disorders and risk drinking in the US general population. *Alcoholism: Clinical and Experimental Research*, 29(5), 844-854. doi: 10.1097/01.alc.0000164374.32229.a2
- Day-Cameron, J. M., Muse, L., Hauenstein, J., Simmons, L., & Correia, C. J. (2009). Alcohol use by undergraduate students on their 21st birthday: Predictors of actual consumption, anticipated consumption, and normative beliefs. *Psychology of Addictive Behaviors*, 23(4), 695-701. doi: 10.1037/a0017213
- Day, K. (2010). I. Pro-anorexia and 'binge-drinking': Conformity to damaging ideals or 'new', resistant femininities? *Feminism & Psychology*, 20(2), 242-248. doi: 10.1177/0959353509351856
- de Lisle, S. M., Dowling, N. A., & Allen, J. S. (2012). Mindfulness and problem gambling: a review of the literature. *Journal Of Gambling Studies / Co-Sponsored By The National Council On Problem Gambling And Institute For The Study Of Gambling And Commercial Gaming*, 28(4), 719-739. doi: 10.1007/s10899-011-9284-7
- de Visser, R. O., & McDonnell, E. J. (2012). 'That's OK. He's a guy': A mixed-methods study of gender double-standards for alcohol use. *Psychology & Health*, 27(5), 618-622. doi: 10.1080/08870446.2011.617444
- de Visser, R. O., & Smith, J. A. (2007a). Alcohol consumption and masculine identity among young men. *Psychology & Health*, 22(5), 595-614. doi: 10.1080/14768320600941772
- de Visser, R. O., & Smith, J. A. (2007b). Young men's ambivalence toward alcohol. *Social Science & Medicine*, 64(2), 350-362. doi: <http://dx.doi.org/10.1016/j.socscimed.2006.09.010>

- DeMarinis, V., Scheffel-Birath, C., & Hansagi, H. (2009). Cultural analysis as a perspective for gender-informed alcohol treatment research in a Swedish context. *Alcohol and Alcoholism*, 44, 615-619. doi: 10.1093/alcalc/agn092
- Dennis, J., Krewski, D., Côté, F.-S., Fafard, E., Little, J., & Ghadirian, P. (2011). Breast cancer risk in relation to alcohol consumption and BRCA gene mutations: A case-only study of gene-environment interaction. *Breast Journal*, 17(5), 477-484. doi: 10.1111/j.1524-4741.2011.01133.x
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). New York: McGraw-Hill.
- Denzin, N. K. (2010). Moments, Mixed Methods, and Paradigm Dialogs. *Qualitative Inquiry*, 16(6), 419-427. doi: 10.1177/1077800410364608
- Denzin, N. K., & Lincoln, Y. S. (2008). *Strategies of qualitative inquiry*. Los Angeles: Sage Publications.
- Department of Families, H., Community Services and Indigenous Affairs. (2009). *The longitudinal study of Australian children*. Canberra: Retrieved from http://www.fahcsia.gov.au/sa/families/pubs/lsac_report_2009/Documents/LSAC_AR_08-09.pdf.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational influences upon individual judgement. *Journal of Abnormal and Social Psychology*, 51, 629 - 636.
- Devine, M. (2010). Seven's weak tackle on Cousins, Society & Culture, *National Times*. Retrieved from <http://www.smh.com.au/opinion/society-and-culture/sevens-weak-tackle-on-cousins-20100827-13vx3.html?rand=1282916936661>
- Digance, J., & Cusack, C. M. (2009). The Melbourne Cup: Australian identity and secular pilgrimage. *Sport in Society*, 12(7), 876. doi: 10.1080/17430430903053109

- Dijkstra, A. F., Verdonk, P., & Lagro-Janssen, A. L. M. (2008). Gender bias in medical textbooks: examples from coronary heart disease, depression, alcohol abuse and pharmacology. *Medical Education*, 42(10), 1021-1028. doi: 10.1111/j.1365-2923.2008.03150.x
- Doherty, E. (2010, 31/08/2010). Addicts, fearful friends seek guidance after Ben Cousins documentary, National, *Herald Sun*. Retrieved from <http://www.heraldsun.com.au/news/national/addicts-fearful-friends-seek-guidance-after-ben-cousins-documentary/story-e6frf7l6-1225912165817>
- Dom Perignon. Retrieved 4/10/11, 2011, from <http://www.domperignon.com/>
- Dowling, M. (2006). Approaches to reflexivity in qualitative research. *Nurse Researcher*, 13(3), 7-21.
- Dowling, R., & Carlsen. (1998). *Wine tourism: Perfect partners - Proceedings of the first Australian Wine Tourism Conference*. Paper presented at the The first Australian Wine Tourism Conference, Perth, Western Australia.
- Downey, G. (1994). Ladies night at Exedus: Dancing humor, sex, and subversion. *repercussions*, 3(2), 96.
- Dumbili, E. W. (2014). Use of mixed methods designs in substance research: a methodological necessity in Nigeria. *Quality & Quantity*, 48(5), 2841-2857. doi: 10.1007/s11135-013-9928-z
- Dumitrescu, A. L., Duta, C., Dogaru, C. B., & Manolescu, B. (2013). Predicting undergraduates' intentions to improve oral health behaviors: the importance of self-identity - a pilot study. *Journal of dental hygiene : JDH / American Dental Hygienists' Association*, 87(4), 224.
- Dumitrescu, R. G., & Shields, P. G. (2005). The etiology of alcohol-induced breast cancer. *Alcohol*, 35(3), 213-225. doi: 10.1016/j.alcohol.2005.04.005

- Duncan, E. M., Forbes-Mckay, K. E., & Henderson, S. E. (2012). Alcohol use during pregnancy: An application of the Theory of Planned Behavior. *Journal of Applied Social Psychology, 42*(8), 1887-1903. doi: 10.1111/j.1559-1816.2012.00923.x
- Eldridge, A., & Roberts, M. (2008). Hen parties: Bonding or brawling? *Drugs: Education, Prevention & Policy, 15*(3), 323-328. doi: 10.1080/09687630801920872
- Ennett, S. T., Foshee, V. A., Bauman, K. E., Hussong, A., Cai, L., Reyes, H. L. M., . . . DuRant, R. (2008). The social ecology of adolescent alcohol misuse. *Child Development, 79*(6), 1777-1791. doi: 10.1111/j.1467-8624.2008.01225.x
- Epstein, E. E., Fischer-Elber, K., & Al-Otaiba, Z. (2007). Women, aging, and alcohol use disorders. *Journal of Women & Aging, 19*(1/2), 31-48. doi: 10.1300/J074v19n01_03
- Erdfelder, F. F., Buchner, E., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160. Download PDF. *Behavior Research Methods, 41*, 1149-1160.
- Ettorre, E. (2004). Revisioning women and drug use: Gender sensitivity, embodiment and reducing harm. *International Journal of Drug Policy, 15*(5-6), 327-335. doi: <http://dx.doi.org/10.1016/j.drugpo.2004.06.009>
- Facebook TM. (2010). Down Under Bar & Grill. from <http://www.facebook.com/downunderbarbrisbane>
- Fekadu, Z., & Kraft, P. (2001). Self-identity in planned behavior perspective: Past behavior and its moderating effects on self-identity-intention relations. *Social Behavior and Personality, 29*, 671-684.
- Fekete, S., Schmidtke, A., Takahashi, Y., Etzersdorfer, E., Upanne, M., & Osvath, P. (2001). Mass media, cultural attitudes, and suicide: Results of an international comparative study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 22*(4), 170-172. doi: 10.1027//0227-5910.22.4.170

- Fernandez, A. C., Wood, M. D., Stein, L. A. R., & Rossi, J. S. (2010). Measuring mindfulness and examining its relationship with alcohol use and negative consequences. *Psychology of Addictive Behaviors*, 24(4), 608-616. doi: 10.1037/a0021742
- Fielder, L., Donovan, R. J., & Ouschan, R. (2009). Exposure of children and adolescents to alcohol advertising on Australian metropolitan free-to-air television. *Addiction*, 104, 1157-1165. doi: 10.1111/j.1360-0443.2009.02592.x
- Fillmore, M. T., & Weafer, J. (2012). Acute tolerance to alcohol in at-risk binge drinkers. *Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors*, 26(4), 693-702. doi: 10.1037/a0026110
- Finlay, L., & Gough, B. (2008). *Reflexivity : A practical guide for researchers in health and social sciences*
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.
- Fletcher, J. M. (2012). Peer influences on adolescent alcohol consumption: evidence using an instrumental variables/fixed effect approach. *Journal of Population Economics*, 25(4), 1265-1286. doi: 10.1007/s00148-011-0365-9
- Franklin, D. (2010, 2 November 2010). American wins the Melbourne Cup, ABC News Online, ABC News. Retrieved from <http://www.abc.net.au/news/2010-11-02/american-wins-the-melbourne-cup/2321202>
- Freeman, N., Friedman, R. S., Bartholow, B. D., & Wulfert, E. (2010). Effects of alcohol priming on social disinhibition. *Experimental and Clinical Psychopharmacology*, 18(2), 135-144. doi: 10.1037/a0018871

- French, D. P., & Cooke, R. (2012). Using the Theory of Planned Behaviour to understand binge drinking: The importance of beliefs for developing interventions. *British Journal of Health Psychology*, 17(1), 1- 17.
- Furtwængler, N. A. F. F., & de Visser, R. O. (2012). Lack of international consensus in low-risk drinking guidelines. *Drug and Alcohol Review*, n/a-n/a. doi: 10.1111/j.1465-3362.2012.00475.x
- Galaif, E. R., Stein, J. A., Newcomb, M. D., & Bernstein, D. P. (2001). Gender differences in the prediction of problem alcohol use in adulthood: exploring the influence of family factors and childhood maltreatment. *Journal of Studies on Alcohol*, 62(4), 486-493.
- Gallego-Moya, M. S., Ibáñez-Ribes, M. I., Mezquita-Guillamón, L., Moya-Higueras, J., Villa-Martín, H., Viruela-Royo, A. M., . . . Ortet-Fabregat, G. (2014). Personality and deviant peers' influence on alcohol use in adolescence. *Personality and Individual Differences*, 60(Journal Article), S63. doi: 10.1016/j.paid.2013.07.271
- Gannon, B., Rosta, L., Reeve, M., Hyde, M. K., & Lewis, I. (2014). Does it matter whether friends, parents, or peers drink walk? Identifying which normative influences predict young pedestrian's decisions to walk while intoxicated. *Transportation Research Part F: Traffic Psychology and Behaviour*, 22(Journal Article), 12-24. doi: 10.1016/j.trf.2013.10.007
- Gardner, B., de Bruijn, G.-J., & Lally, P. (2012). Habit, identity, and repetitive action: A prospective study of binge-drinking in UK students. *British Journal of Health Psychology*, 17(3), 565-581. doi: 10.1111/j.2044-8287.2011.02056.x
- Garland, E., Boettiger, C., Gaylord, S., Chanon, V., & Howard, M. (2012). Mindfulness is inversely associated with Alcohol Attentional Bias among recovering alcohol-dependent adults. *Cognitive Therapy and Research*, 36(5), 441-450. doi: 10.1007/s10608-011-9378-7

- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.
- Gemignani, M., & Peña, E. (2007). Postmodern conceptualizations of culture in social constructionism and cultural studies. *Journal of Theoretical and Philosophical Psychology*, 27(2), 276-300. doi: 10.1037/h0091297
- Genzuck, M. (2003). *A Synthesis of Ethnographic Research*. Occasional Papers Series. Center for Multilingual, Multicultural Research. Rossier School of Education, University of Southern California. California: LA.
- Gergen, K. J. (1994). *Realities and relationships: Soundings in social constructionism*. Cambridge, Massachusetts: Harvard University Press.
- Gfroerer, J., Penne, M., Pemberton, M., & Folsom, R. (2003). Substance abuse treatment need among older adults in 2020: The impact of the aging baby-boom cohort. *Drug and Alcohol Dependence*, 69, 127-135.
- Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31(1), 399-418. doi: doi:10.1146/annurev.publhealth.012809.103604
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. California: Sociology Press.
- Glass, J. E., Mowbray, O. P., Link, B. G., Kristjansson, S. D., & Bucholz, K. K. (2013). Alcohol stigma and persistence of alcohol and other psychiatric disorders: a modified labeling theory approach. *Drug and Alcohol Dependence*, 133(2), 685.
- Glindemann, K. E., Wiegand, D. M., & Geller, E. S. (2007). Celebratory Drinking and Intoxication: A Contextual Influence on Alcohol Consumption. *Environment & Behavior*, 39(3), 352-366.
- Godin, G., Conner, M., & Sheeran, P. (2005). Bridging the intention-behaviour 'gap': The role of moral norm. *The British Journal of Social Psychology*, 44, 497-512.

- Goldman, M. S., Darkes, J., & Del Boca, F. K. (1999). Expectancy mediation of biopsychosocial risk for alcohol use and alcoholism. In I. Kirsch (Ed.), *How expectancies shape experience*. (pp. 233-262): American Psychological Association.
- Goldman, P. (Writer). (2010). Such is Life - The troubled times of Ben Cousins. In M. Gudinski (Producer): Seven Network Australia.
- Goodall, J. (1986). *The chimpanzees of Gombe" Patterns of behavior*. Cambridge, USA: Harvard University Press.
- Goodrick, D. (2010). *Qualitative research: Design, analysis and representation - Workshop notes*. ACSPRI. Workshop notes. ACSPRI. Brisbane.
- Gordon, R., MacKintosh, A. M., & Moodie, C. (2010). The impact of alcohol marketing on youth drinking behaviour: A two-stage cohort study. *Alcohol and Alcoholism*, 45(5), 470-480. doi: 10.1093/alcalc/agq047
- Graham, K., Wells, S., Bernards, S., & Dennison, S. (2010). "Yes, I do but not with you": Qualitative analyses of sexual/romantic overture-related aggression in bars and clubs. *Contemporary Drug Problems*, 37(2), 197-240. doi: 10.1177/009145091003700203
- Gray, R. (2010). Shame, labeling and stigma: Challenges to counseling clients in alcohol and other drug settings. *Contemporary Drug Problems*, 37(4), 685.
- Grazian, D. (2007). The girl hunt: Urban nightlife and the performance of masculinity as collective activity. *Symbolic Interaction*, 30(2), 221.
- Green, C. A., Polen, M. R., Janoff, S. L., Castleton, D. K., & Perrin, N. A. (2007). "Not getting tanked": Definitions of moderate drinking and their health implications. *Drug and Alcohol Dependence*, 86(2-3), 265-273.
- Green, K. E., Pugh, L. A., McCrady, B. S., & Epstein, E. E. (2008). Unique aspects of female-primary alcoholic relationships. *Addictive Disorders & Their Treatment*, 7(3), 169-176.

- Green, R. (2008). *Families in Australia: 2008*. Canberra: Department of the Prime Minister and Cabinet, Canberra Retrieved from http://www.dpmc.gov.au/publications/families/docs/Families_in_Australia_08_low.pdf.
- Greene, J. C. (2008). Is mixed methods social inquiry a distinctive methodology? *Journal of Mixed Methods Research*, 2(1), 7-22. doi: 10.1177/1558689807309969
- Greenfield, T. K., & Room, R. (1997). Situational norms for drinking and drunkenness: Trends in the US adult population, 1979-1990. *Addiction*, 92(1), 33-47.
- Griffin, J. A., Umstattd, M. R., & Usdan, S. L. (2010). Alcohol use and high-risk sexual behavior among collegiate women: A review of research on Alcohol Myopia Theory. *Journal of American College Health*, 58(6), 523-532.
- Grønkjær, M., Curtis, T., Crespigny, C. D., & Delmar, C. (2011). Acceptance and expectance: Cultural norms for alcohol use in Denmark. *International journal of qualitative studies on health and well-being*, 6(4), 1-11.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Gullo, M. J., Dawe, S., Kambouropoulos, N., Staiger, P. K., & Jackson, C. J. (2010). Alcohol expectancies and drinking refusal self-efficacy mediate the association of impulsivity with alcohol misuse. (Journal Article).
- Gunzerath, L., Faden, V., Zakhari, S., & Warren, K. (2004). National Institute on Alcohol Abuse and Alcoholism report on moderate drinking. *Alcoholism: Clinical and Experimental Research*, 28(6), 829-847. doi: 10.1097/01.alc.0000128382.79375.b6
- Hagger, M. S., Anderson, M., Kyriakaki, M., & Darkings, S. (2007). Aspects of identity and their influence on intentional behavior: Comparing effects for three health behaviors.

- Personality and Individual Differences*, 42(2), 355-367. doi:
<http://dx.doi.org/10.1016/j.paid.2006.07.017>
- Hagger, M. S., Lonsdale, A. J., Hein, V., Koka, A., Lintunen, T., Pasi, H., . . . Chatzisarantis, N. L. D. (2012). Predicting alcohol consumption and binge drinking in company employees: An application of planned behaviour and self-determination theories. *British Journal of Health Psychology*, 17(2), 379-407. doi: 10.1111/j.2044-8287.2011.02043.x
- Hakim, C. (2012). *Research design: Successful designs for social economics research (2nd Edition)*: Taylor and Francis.
- Hall, E. T. (1966). *The hidden dimension*. New York: Doubleday.
- Hall, R. F. (2013). Mixed methods: In search of a paradigm. In T. Le & Q. Le (Eds.), *Conducting research in a changing and challenging world* (pp. 71-78). London: Nova Science Publishing Inc.
- Ham, L. S., & Garcia, T. A. (2010). Assessment of social skills in substance use disorders. In D. W. Nangle, D. J. Hansen, C. A. Erdley & P. J. Norton (Eds.), *Practitioner's guide to empirically based measures of social skills*. (pp. 225-249). New York, NY US: Springer Publishing Co.
- Hamilton, K., & Schmidt, H. (2013). Critical beliefs underlying young Australian males' intentions to engage in drinking and swimming. *SAGE Open*, 3.
<http://sgo.sagepub.com/content/3/4/2158244013508959>
doi:10.1177/2158244013508959
- Hanson, W. E., Creswell, J. W., Clark Plano, V. L., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, 52(2), 224-235. doi: 10.1037/0022-0167.52.2.224

- Hassan, E. (2005). Recall bias can be a threat to retrospective and prospective research designs. *The Internet Journal of Epidemiology*, 3(2).
- Headland, T. N., Pike, K. L., & Harris, M. (1990). *Emics and etics: The insider/outsider debate*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Hellman, M., & Einstein, S. (2015). Encoding and decoding substance use and addictive behaviors—The roles of cultural images. *Substance Use & Misuse*, 50(4), 415-418. doi:10.3109/10826084.2015.978178
- Hendrie, C. A., Mannion, H. D., & Godfrey, G. K. (2009). Evidence to suggest that nightclubs function as human sexual display grounds. *Behaviour*, 146(10), 1331-1348. doi:10.1163/156853909x427704
- Henry, K. L., Slater, M. D., & Oetting, E. R. (2004). Alcohol use in early adolescence: The effect of changes in risk taking, perceived harm and friends' alcohol use. *Journal of Studies on Alcohol*, 66, 275-283.
- Hinds, R. (2010). The Cousins blueprint for airing the dirty laundry *The Sydney Morning Herald*. Retrieved from <http://www.smh.com.au/sport/the-cousins-blueprint-for-airing-the-dirty-laundry-20100827-13vw.html?rand=1282916900538>
- Hobbs, D., Lister, S., Hadfield, P., Winlow, S., & Hall, S. (2000). Receiving shadows: Governance and liminality in the night-time economy. *British Journal of Sociology*, 51, 701-717. doi: 10.1080/00071310020015334
- Holland, C. A., Hill, R., & Cooke, R. (2009). Understanding the role of self-identity in habitual risky behaviours: Pedestrian road-crossing decisions across the lifespan. *Health Education Research*, 24, 674-685.
- Holloway, S. L., Valentine, G., & Jayne, M. (2009). Masculinities, femininities and the geographies of public and private drinking landscapes. *Geoforum*, 40(5), 821-831. doi:<http://dx.doi.org/10.1016/j.geoforum.2009.06.002>

- Hong, J. S. (2010). Understanding Vietnamese youth gangs in America: An ecological systems analysis. *Aggression & Violent Behavior, 15*(4), 253-260. doi: 10.1016/j.avb.2010.01.003
- Huchting, K., Lac, A., & LaBrie, J. W. (2008). An application of the Theory of Planned Behavior to sorority alcohol consumption. *Addictive Behaviors, 33*(4), 538-551. doi: <http://dx.doi.org/10.1016/j.addbeh.2007.11.002>
- Hughes, K., Quigg, Z., Eckley, L., Bellis, M., Jones, L., Calafat, A., . . . van Hasselt, N. (2011). Environmental factors in drinking venues and alcohol-related harm: The evidence base for European intervention. *Addiction, 106 Suppl 1*, 37-46. doi: 10.1111/j.1360-0443.2010.03316.x
- Huselid, R. F., & Cooper, M. L. (1992). Gender roles as mediators of sex differences in adolescent alcohol use and abuse. *Journal of Health and Social Behavior, 33*(4), 348-362.
- Hush, K. (2010, 3 November, 2010). Hat's all, folks, as clothes horses take to the field, *Sydney Morning Herald*. Retrieved from <http://www.smh.com.au/lifestyle/fashion/hats-all-folks-as-clothes-horses-take-to-the-field-20101102-17cdx.html>
- Hutton, F. (2004). 'Up for it, mad for it? Women, drug use and participation in club scenes'. *Health, Risk & Society, 6*(3), 223-237. doi: 10.1080/1369857042000275641
- Hutton, F., Wright, S., & Saunders, E. (2013). Cultures of intoxication: Young women, alcohol, and harm reduction. *Contemporary Drug Problems, 40*(4), 451.
- Hutton, H. E., McCaul, M. E., Santora, P. B., & Erbelding, E. J. (2008). The Relationship Between Recent Alcohol Use and Sexual Behaviors: Gender Differences Among Sexually Transmitted Disease Clinic Patients. *Alcoholism: Clinical and Experimental Research, 32*(11), 2008-2015. doi: 10.1111/j.1530-0277.2008.00788.x

ICAP. (2010). International Drinking Guidelines.

<http://www.icap.org/Table/InternationalDrinkingGuidelines>

Ives, B., Obenchain, K., & Oikonomidou, E. (2010). Cultural attitudes of Romanian youth.

International Journal of Education, 2(1), 1-18.

Jang, K. L., & Livesley, W. J. (1997). Gender-specific etiological differences in alcohol and drug problems: A behavioural genetic analysis. *Addiction*, 92(10), 1265-1276.

Jernigan, D. H. P., Ostroff, J. B. A., Ross, C. M. B. A., & O'Hara, J. A. I. I. I. M. A. (2004).

Sex differences in adolescent exposure to alcohol advertising in magazines. *Archives of Pediatrics & Adolescent Medicine*, 158(7), 629-634.

Johnston, D. W., Johnston, M., Pollard, B., Kinmonth, A.-L., & Mant, D. (2004). Motivation is not enough: Prediction of risk behavior following diagnosis of coronary heart disease

from the Theory of Planned Behavior. *Health Psychology*, 23(5), 533-538. doi:

10.1037/0278-6133.23.5.533

Johnston, K. J., & White, K. M. (2003). Binge-drinking: A test of the role of group norms in

The Theory of Planned Behaviour. *Psychology & Health*, 18(1), 63-77.

Jones, D. L., Heflinger, C. A., & Saunders, R. C. (2007). The ecology of adolescent substance abuse service utilization. *American Journal of Community Psychology*, 40(3-4), 345-

358. doi: 10.1007/s10464-007-9138-8

Jones, M. E., Cason, C. L., & Bond, M. L. (2004). Cultural attitudes, knowledge, and skills of a health workforce. *Journal of Transcultural Nursing*, 15(4), 283-290. doi:

10.1177/1043659604268966

Jones, S. C., & Reid, A. (2010). The use of female sexuality in Australian alcohol advertising: Public policy implications of young adults reactions to stereotypes. *Journal of Public*

Affairs, 10(12), 19-35.

- Jones, S. C., & Rossiter, J. (2003). Personality characteristics ascribed to young women who drink alcohol. *Drug and Alcohol Review*, 22(2), 117-123.
- Jootun, D., McGhee, G., & Marland, G. R. (2009). Reflexivity: Promoting rigour in qualitative research. *Nursing Standard*, 23(23), 42-46.
- Kang, Y., Gruber, J., & Gray, J. R. (2013). Mindfulness and de-Automatization. *Emotion Review*, 5(2), 192-201. doi: 10.1177/1754073912451629
- Kanny, D., Liu, Y., Brewer, R. D., Eke, P. I., Cox, S. N., Cheal, N. E., & Green, Y. (2013). Vital signs: Binge drinking among women and high school girls - United States, 2011. *Morbidity and Mortality Weekly Report* (Vol. 62, pp. 9-13): Centers for Disease Control and Prevention.
- Karakos, H. L. (2014). Positive peer support or negative peer influence? The role of peers among adolescents in recovery high schools. *Peabody Journal of Education*, 89(2), 214-228. doi: 10.1080/0161956x.2014.897094
- Kavanagh, D. J., Andrade, J., & May, J. (2004). Beating the urge: Implications of research into substance-related desires. *Addictive Behaviors*, 29(7), 1359-1372. doi: <http://dx.doi.org/10.1016/j.addbeh.2004.06.009>
- Kay, A., Taylor, T. E., Barthwell, A. G., Wichelecki, J., & Leopold, V. (2010). Substance use and women's health. *Journal of Addictive Diseases*, 29(2), 139-163. doi: 10.1080/10550881003684640
- Kenneavy, K. (2008). *Adolescent gender attitudes: Structure and media influence*. (Ph.D. 3304318), The University of North Carolina at Chapel Hill, United States -- North Carolina. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304529865?accountid=13380> ProQuest Dissertations & Theses (PQDT) database.

- Kerr, W. C., Greenfield, T. K., Bond, J., Ye, Y., & Rehm, J. (2009). Age–period–cohort modelling of alcohol volume and heavy drinking days in the US National Alcohol Surveys: divergence in younger and older adult trends. *Addiction*, *104*(1), 27-37. doi: 10.1111/j.1360-0443.2008.02391.x
- Kim, Y., & Hong, O. (2013). Understanding controlled drinking behavior among Korean male workers. *American Journal of Health Behavior*, *37*(2), 181-189. doi: 10.5993/ajhb.37.2.5
- King, K. A., & Vidourek, R. A. (2010). Psychosocial factors associated with recent alcohol use among Hispanic youth. *Hispanic Journal of Behavioral Sciences*, *32*(3), 470-485. doi: 10.1177/0739986310372234
- Kirkby, D. (1997). *Barmaids: A history of women's work in pubs*. Cambridge; Melbourne: Cambridge University Press.
- Kirkby, D. (2003). "Beer, glorious beer": Gender politics and Australian popular culture. *Journal of Popular Culture*, *37*(2), 244.
- Knibbe, R. A., Derickx, M., Kuntsche, S., Grittner, U., & Bloomfield, K. (2006). A comparison of the Alcohol Use Disorder Identification Test (AUDIT) in general population surveys in nine European countries. *Alcohol and Alcoholism*, *41*(suppl 1), i19-i25. doi: 10.1093/alcalc/agl072
- Koh, K. (2013). Theory-to-research-to-theory strategy: A research-based expansion of radical change theory. *Library and Information Science Research*, *35*(1), 33-40. doi: 10.1016/j.lisr.2012.09.003
- Kubička, L., & Csémy, L. (2008). Women's gender role orientation predicts their drinking patterns: a follow-up study of Czech women. *Addiction*, *103*(6), 929-937. doi: 10.1111/j.1360-0443.2008.02186.x

- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: SAGE.
- Larsen, H., Engels, R. C. M. E., Granic, I., & Overbeek, G. (2009). An experimental study on imitation of alcohol consumption in same-sex dyads. *Alcohol and Alcoholism*, 44(3), 250-255. doi: 10.1093/alcalc/agp002
- Lau-Barraco, C. (2009). Environmental context effects on alcohol cognitions and immediate alcohol consumption. *Addiction Research & Theory*, 17(3), 306-314. doi: 10.1080/16066350802346201
- Lawlor, M. C., & Mattingly, C. F. (2001). Beyond the unobtrusive observer: Reflections on researcher-informant relationships in urban ethnography. *The American Journal of Occupational Therapy*, 55(2), 147-154.
- Lemke, S., Schutte, K., Brennan, P., & Moos, R. (2008). Gender Differences in Social Influences and Stressors Linked to Increased Drinking. *Journal of Studies on Alcohol and Drugs*, 69(5), 695.
- Lemon, A. (2012). Melbourne Cup. In J. Nauright (Ed.), *Sports around the world: History, culture and practice* (pp. 407-408): ABC-Clio.
- Leonard, K. E., & Homish, G. G. (2008). Predictors of heavy drinking and drinking problems over the first 4 years of marriage. *Psychology of Addictive Behaviors*, 22(1), 25-35. doi: 10.1037/0893-164X.22.1.25
- Leonard, K. E., & Mudar, P. (2004). Husbands' influence on wives' drinking: Testing a Relationship Motivation Model in the early years of marriage. *Psychology of Addictive Behaviors*, 18(4), 340-349. doi: 10.1037/0893-164X.18.4.340
- Lewis, I., Watson, B., & White, K. M. (2010). Response efficacy: The key to minimizing rejection and maximizing acceptance of emotion-based anti-speeding messages. *Accident Analysis and Prevention*, 42, 459-467. doi: 10.1016/j.aap.2009.09.008

- Lewis, I., Watson, B., & White, K. M. (2013). Extending the explanatory utility of the EPPM beyond fear-based persuasion. *Health Communication*, 28, 84-98. doi: 10.1080/10410236.2013.743430
- Leyshon, M. (2008). 'We're stuck in the corner': Young women, embodiment and drinking in the countryside. *Drugs: Education, Prevention & Policy*, 15(3), 267-289. doi: 10.1080/09687630801920286
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: SAGE Publications, Inc.
- Lindgren, K. P., Foster, D. W., Westgate, E. C., & Neighbors, C. (2013). Implicit drinking identity: Drinker & me associations predict college student drinking consistently. *Addictive Behaviors*, 38(5), 2163-2166. doi: <http://dx.doi.org/10.1016/j.addbeh.2013.01.026>
- Lindgren, K. P., Neighbors, C., Teachman, B. A., Wiers, R. W., Westgate, E., & Greenwald, A. G. (2012). I Drink Therefore I am: Validating Alcohol-Related Implicit Association Tests. *Psychology of Addictive Behaviors*. doi: 10.1037/a0027640
- Lindsay, J. (2006). A big night out in Melbourne: Drinking as an enactment of class and gender. *Contemporary Drug Problems*, 33, 29-61.
- Livingston, J. A., Testa, M., & Windle, M. (2012). Alcohol initiation contexts of adolescent girls. *Alcoholism: Clinical and Experimental Research*, 36(S1).
- Livingstone, C., Moodie, A. R., & Tobin, C. (2011). A review of public opinion towards alcohol controls in Australia. *BMC Public Health*, 11, 58.
- Loughran, H. (2010). Eighteen and celebrating: Birthday cards and drinking culture. *Journal of Youth Studies*, 13(6), 631-645. doi: 10.1080/13676261003801721

- Lueke, A., & Gibson, B. (2015). Mindfulness meditation reduces implicit age and race bias: The role of reduced automaticity of responding. *Social Psychological and Personality Science*, 6(3), 284-291. doi: 10.1177/1948550614559651
- Lyons, A. C. (2009). Masculinities, femininities, behaviour and health. *Social and Personality Psychology Compass*, 3(4), 394-412. doi: 10.1111/j.1751-9004.2009.00192.x
- Lyons, A. C., & Willott, S. (2008). Alcohol consumption, gender identities and women's changing social positions. *Sex Roles*, 59(9-10), 694-712.
- Maas, J., Hietbrink, L., Rinck, M., & Keijsers, G. P. J. (2013). Changing automatic behavior through self-monitoring: Does overt change also imply implicit change? *Journal of Behavior Therapy and Experimental Psychiatry*, 44(3), 279-284. doi: <http://dx.doi.org/10.1016/j.jbtep.2012.12.002>
- MacKillop, J., Mattson, R. E., Anderson Mackillop, E. J., Castelda, B. A., & Donovan, P. J. (2007). Multidimensional assessment of impulsivity in undergraduate hazardous drinkers and controls. *Journal of Studies on Alcohol and Drugs*, 68(6), 785.
- Makela, P., Gmel, G., Grittner, U., Kuendig, H., Kuntsche, S., Bloomfield, K., & Room, R. (2006). Drinking patterns and their gender differences in Europe. *Alcohol and Alcoholism*, 41(suppl 1), i8-i18. doi: 10.1093/alcalc/agl071
- Mannetti, L., Pierro, A., & Livi, S. (2004). Recycling: Planned and self-expressive behaviour. *Journal of Environmental Psychology*, 24(2), 227-236. doi: <http://dx.doi.org/10.1016/j.jenvp.2004.01.002>
- Manton, E., Room, R., Giorgi, C., & Thorn, M. (Eds.). (2014). *Stemming the tide of alcohol*. Melbourne: FARE and University of Melbourne.
- Marcoux, B. C., & Shope, J. T. (1997). Application of the Theory of Planned Behavior to adolescent use and misuse of alcohol. *Health Education Research*, 12(3), 323-331. doi: 10.1093/her/12.3.323

- Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526. doi: 10.1093/fampra/13.6.522
- Martin, R. J., Usdan, S., Nelson, S., Umstattd, M. R., LaPlante, D., Perko, M., & Shaffer, H. (2010). Using the theory of planned behavior to predict gambling behavior. *Psychology of Addictive Behaviors*, 24(1), 89-97. doi: 10.1037/a0018452
- Mason, J. (2006). Mixing methods in a qualitatively driven way. *Qualitative Research*, 6(1), 9-25. doi: 10.1177/1468794106058866
- Matheson, J. L. (2008). Women's Issues With Substance Use, Misuse, and Addictions: One Perspective. *Substance Use & Misuse*, 43(8-9), 1274-1276. doi: doi:10.1080/10826080802215163
- Maticka-Tyndale, E., Herold, E. S., & Oppermann, M. (2003). Casual sex among Australian Schoolies. *Journal of Sex Research*, 40(2), 158.
- McCutcheon, V. V., Lessov-Schlaggar, C. N., Steinley, D., & Bucholz, K. K. (2014). Social network drinking and family history contribute equally to first-onset alcohol dependence in high risk adults. *Drug and alcohol dependence*, 141, 145-148. doi: 10.1016/j.drugalcdep.2014.04.009
- Measham, F. (2002). "Doing gender"--"doing drugs": Conceptualizing the gendering of drugs cultures. *Contemporary Drug Problems*, 29(2), 335.
- Measham, F. (2004a). The decline of ecstasy, the rise of 'binge' drinking and the persistence of pleasure. *Probation Journal*, 51(4), 309-326. doi: 10.1177/0264550504048220
- Measham, F. (2004b). Play space: Historical and socio-cultural reflections on drugs, licensed leisure locations, commercialisation and control. *International Journal of Drug Policy*, 15, 337-345. doi: 10.1016/j.drugpo.2004.08.002

- Measham, F. (2006). The new policy mix: Alcohol, harm minimisation, and determined drunkenness in contemporary society. *International Journal of Drug Policy*, 17, 258-268. doi: 10.1016/j.drugpo.2006.02.013
- Measham, F., & Brain, K. (2005). 'Binge' drinking, British alcohol policy and the new culture of intoxication. *Crime, Media, Culture*, 1(3), 262-283. doi: 10.1177/1741659005057641
- Measham, F., & Ostergaard, J. (2009). The public face of binge drinking: British and Danish young women, recent trends in alcohol consumption and the European binge drinking debate. *Probation Journal :The Journal of Community and Criminal Justice*, 56(4), 415-434. doi: 10.1177/0264550509346526
- Measham, F., & Shiner, M. (2009). The legacy of 'normalisation': The role of classical and contemporary criminological theory in understanding young people's drug use. *International Journal of Drug Policy*, 20, 502-508. doi: 10.1016/j.drugpo.2009.02.001
- Meisels, M. (1999). Naturalistic observation in psychoanalysis. *Psychoanalytic Social Work*, 6(2), 19-35. doi: 10.1300/J032v06n02_02
- Melo, L., Evans, G., Le Pollès, N., Delahunty, C., & Cox, D. N. (2012). Predicting wine consumption based on previous 'drinking history' and associated behaviours. *Journal of Food Research*, 1(1), 79-93.
- Merriam, S. B. (Ed.). (2002). *Qualitative research in practice: Examples for discussion and analysis*. (1st ed.). San Francisco, CA: John Wiley & Sons, Inc.
- Midanik, L. T., & Room, R. (1992). The epidemiology of alcohol consumption. *Alcohol Health and Research World*, 16(3), 183.
- Miller, B. A., Holder, H. D., & Voas, R. B. (2009). Environmental strategies for prevention of drug use and risks in clubs. *Journal of Substance Use*, 14(1), 19-38.

- Miller, M. A., Hays, L. R., & Fillmore, M. T. (2012). Lack of tolerance to the disinhibiting effects of alcohol in heavy drinkers. *Psychopharmacology*, 224(4), 511-518. doi: 10.1007/s00213-012-2786-x
- Ministerial Council on Drug Strategy. (2011). *National Drug Strategy 2010-2015*. Canberra: Retrieved from [http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/D B4076D49F13309FCA257854007BAF30/\\$File/nds2015.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/D B4076D49F13309FCA257854007BAF30/$File/nds2015.pdf).
- Moen, P. (1996). Life course perspective on retirement, gender, and well-being. *Journal of Occupational Health Psychology*, 1(2), 131-144.
- Moen, P., Robison, J., & Dempster-McClain, D. (1995). Caregiving and women's well-being: a life course approach. *Journal of Health and Social Behavior*, 36(3), 259-273.
- Montemurro, B., & McClure, B. (2005). Changing gender norms for alcohol consumption: Social drinking and lowered inhibitions at Bachelorette parties. *Sex Roles*, 52(5/6), 279-288. doi: 10.1007/s11199-005-2672-7
- Moors, A., & De Houwer, J. (2006). Automaticity: A theoretical and conceptual analysis. *Psychological Bulletin*, 132(2), 297-326. doi: 10.1037/0033-2909.132.2.297
- Moos, R., Schutte, K., Brennan, P., & Moos, B. (2010). Late-life and life history predictors of older adults' high-risk alcohol consumption and drinking problems. *Drug and Alcohol Dependence*, 108, 13-20. doi: 10.1016/j.drugalcdep.2009.11.005
- Morse, J. M. (1994). Going in "Blind". *Qualitative Health Research*, 4(1), 3-5. doi: 10.1177/104973239400400101
- Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage Publications.

- Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks: Sage Publications.
- Morwitz, V. G., Johnson, E., & Schmittlein, D. (1993). Does measuring intent change behavior? *Journal of Consumer Research*, 20(1), 46-61. doi: 10.2307/2489199
- Moss, A. C., Erskine, J. A. K., Albery, I. P., Allen, J. R., & Georgiou, G. J. (2015). To suppress, or not to suppress? That is repression: Controlling intrusive thoughts in addictive behaviour. *Addictive Behaviors*, 44(Journal Article), 65.
- Muggli, E., Cook, B., O'Leary, C., Forster, D., & Halliday, J. (2010). Alcohol in pregnancy: What questions should we be asking? (Commonwealth Department of Health and Ageing, Trans.). Canberra.
- Mullen, K., Watson, J., Swift, J., & Black, D. (2007). Young men, masculinity and alcohol. *Drugs: Education, Prevention & Policy*, 14(2), 151-165.
- Muñoz-Laboy, M., Weinstein, H., & Parker, R. (2007). The HipHop club scene: Gender, grinding and sex. *Culture, Health & Sexuality*, 9(6), 615-628. doi: 10.1080/13691050701528590
- Murgraff, V., Abraham, C., & McDermott, M. (2007). Reducing friday alcohol consumption among moderate, women drinkers: evaluation of a brief evidence-based intervention. *Alcohol and alcoholism (Oxford, Oxfordshire)*, 42(1), 37.
- Murnaghan, D. A., Blanchard, C., Rodgers, W., La Rosa, J., Macquarrie, C., MacClellan, D., & Gray, B. (2009). The influence of student-level normative, control and behavioral beliefs on staying smoke-free: An application of Ajzen's theory of planned behavior. *Addiction Research & Theory*, 17(5), 469-480. doi: 10.1080/16066350802011649
- Musselwhite, K., Cuff, L., McGregor, L., & King, K. M. (2007). The telephone interview is an effective method of data collection in clinical nursing research: A discussion paper.

International journal of nursing studies, 44(6), 1064-1070. doi:

10.1016/j.ijnurstu.2006.05.014

- Nastasi, B. K., Hitchcock, J. H., & Brown, L. M. (2010). An inclusive framework for conceptualizing mixed methods design typologies: Moving toward fully integrated synergistic research models. In A. Tashakkori & C. Teddlie (Eds.), *Mixed methods in social and behavioral research* (2 ed., pp. 305-338). Thousand Oaks, CA: SAGE Publications, Inc.
- Nastasi, B. K., & Schensul. (2005). Contributions of qualitative research to the validity of intervention research. *Journal of School Psychology*, 43(3), 177-195. doi: 10.1016/j.jsp.2005.04.003
- Neighbors, C., Lewis, M. A., Bergstrom, R. L., & Larimer, M. E. (2006). Being controlled by normative influences: Self-determination as a moderator of a normative feedback alcohol intervention. *Health Psychology*, 25(5), 571-579. doi: 10.1037/0278-6133.25.5.571
- Neighbors, C., O'Connor, R. M., Lewis, M. A., Chawla, N., Lee, C. M., & Fossos, N. (2008). The relative impact of injunctive norms on college student drinking: The role of reference group. *Psychology of Addictive Behaviors*, 22(4), 576-581. doi: 10.1037/a0013043
- Neighbors, C., Spieker, C. J., Oster-Aaland, L., Lewis, M. A., & Bergstrom, R. L. (2005). Celebration intoxication: an evaluation of 21st birthday alcohol consumption. *Journal of American College Health*, 54(2), 76-80. doi: 10.3200/jach.54.2.76-80
- NHMRC. (2009). *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*. Canberra: Retrieved from <http://www.nhmrc.gov.au>.
- Nightingale, D. J., & Cromby, J. (Eds.). (1999). *Social constructionish psychology: A critical analysis of theory and practice*. Philadelphia: Open University Press.

- Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34(7), 913-923. doi: 10.1177/0146167208316691
- Nolen-Hoeksema, S. (2004). Gender differences in risk factors and consequences for alcohol use and problems. *Clinical Psychology Review*, 24(8), 981-1010. doi: 10.1016/j.cpr.2004.08.003
- Norman, P., & Conner, M. (2006). The theory of planned behaviour and binge drinking: Assessing the moderating role of past behaviour within the theory of planned behaviour. *British Journal of Health Psychology*, 11, 55-70. doi: 10.1348/135910705X43741
- Norman, P., Conner, M., & Bell, R. (1999). The theory of planned behavior and smoking cessation. *Health Psychology*, 18(1), 89-94. doi: 10.1037/0278-6133.18.1.89
- NSW Government. (2004). Outcomes of the NSW Summit on Alcohol Abuse: Changing the culture of alcohol use in NSW. Sydney.
- O'Hara, R., Harker, D., Raciti, M., & Harker, M. (2008). Attitudinal, normative and demographic influences on female students' alcohol consumption. *Young Consumers: Insight and Ideas for Responsible Marketers*, 9, 7-16. doi: 10.1108/17473610810857273
- O'Leary, C., Heuzenroeder, L., Elliot, E. J., & Bower, C. (2007). A review of policies on alcohol use during pregnancy in Australia and other English-speaking countries, 2006. *Medical Journal of Australia*, 466-471(9), 466-.
- Opdenakker, R. J. G. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum Qualitative Sozialforschung = Forum : Qualitative Social Research*, 7(4).

- Orbell, S., Lidieth, P., Henderson, C. J., Geeraert, N., Uller, C., Uskul, A. K., & Kyriakaki, M. (2009). Social-cognitive beliefs, alcohol, and tobacco use: A prospective community study of change following a ban on smoking in public places. *Health Psychology, 28*(6), 753-761. doi: 10.1037/a0016943
- Osgood, C. E., & Luria, Z. (1954). A blind analysis of a case of multiple personality using the semantic differential. *The Journal of Abnormal and Social Psychology, 49*(4, Pt.1), 579-591. doi: 10.1037/h0054362
- Ostafin, B. D., & Marlatt, G. A. (2008). Surfing the urge: Experiential acceptance moderates the relation between automatic alcohol motivation and hazardous drinking. *Journal of Social and Clinical Psychology, 27*(4), 404-418.
- Ostafin, B. D., Marlatt, G. A., & Greenwald, A. G. (2008). Drinking without thinking: An implicit measure of alcohol motivation predicts failure to control alcohol use. *Behaviour Research and Therapy, 46*(11), 1210-1219. doi: 10.1016/j.brat.2008.08.003
- Otten, R., Harakeh, Z., Vermulst, A. A., Van den Eijnden, R. J. J. M., & Engels, R. C. M. E. (2007). Frequency and quality of parental communication as antecedents of adolescent smoking cognitions and smoking onset. *Psychology of Addictive Behaviors, 21*(1), 1-12. doi: 10.1037/0893-164x.21.1.1
- Paradis, C., Demers, A., Picard, E., & Graham, K. (2009). The importance of drinking frequency in evaluating individuals' drinking patterns: Implications for the development of national drinking guidelines. *Addiction, 104*(7), 1179-1184. doi: 10.1111/j.1360-0443.2009.02586.x
- Park, A. (2011). Toolies warning as schoolies hit the beaches, *The Age*.
- Parker, H., Williams, L., & Aldridge, J. (2002). The normalization of 'sensible' recreational drug use: Further evidence from the North West England Longitudinal Study. *Sociology, 36*(4), 941-964.

- Parks, C. A., & Heller, N. R. (2013). The influence of early drinking contexts on current drinking among adult lesbian and bisexual women. *Journal of the American Psychiatric Nurses Association, 19*(5), 241-254. doi: 10.1177/1078390313500145
- Parry, G., & Watts, F. (2013). *Behavioural and mental health research : A handbook of skills and methods* Retrieved from <http://QUT.ebib.com.au/patron/FullRecord.aspx?p=1222979>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2 ed.). Beverley Hills, CA: Sage.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Perkins, H. W., & Craig, D. W. (2006). A successful social norms campaign to reduce alcohol misuse among college student-athletes. *Journal of Studies on Alcohol, 67*(6), 880-879.
- Perloff, R. M. (1989). Ego-involvement and the Third Person Effect of televised news coverage. *Communication Research, 16*(2), 236-262. doi: 10.1177/009365089016002004
- Peters, E. N., Khondkaryan, E., & Sullivan, T. P. (2012). Associations between expectancies of alcohol and drug use, severity of partner violence, and posttraumatic stress among women. *Journal of Interpersonal Violence, 27*(11), 2108-2127. doi: 10.1177/0886260511432151
- Peters, G. J. Y., Kok, G., & Abraham, C. (2008). Social cognitive determinants of ecstasy use to target in evidence based interventions: A meta-analytical review. *Addiction, 103*(1), 109-118. doi: 10.1111/j.1360-0443.2007.02041.x
- Pirisi, A. (2000). Alcohol's seige on women's health. *The Journal of Addiction and Mental Health, 3*(3), 13.

- Pop, N. A., & Iorga, A. M. (2012). A new challenge for contemporary marketing: Neuromarketing. *Management & Marketing*, 7(4), 631.
- Powers, J. R., Loxton, D. J., Burns, L. A., Shakeshaft, A., Elliott, E. J., & Dunlop, A. J. (2010). Assessing pregnant women's compliance with different alcohol guidelines: An 11-year prospective study. *Medical Journal of Australia*, 192(12), 690-693.
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64(2), 243-256. doi: 10.1037/0022-3514.64.2.243
- Prentice, P. R., Wheat, A., Goulet, C., & Larkin, K. (2010). Mindfulness and prevention: Acting with Awareness and alcohol. *Annals of Behavioral Medicine*, 39(Supplementary - Abstracts), 38. doi: <http://dx.doi.org/10.1007/s12160-010-9169-5>
- Queensland Government. (2008). *Young Women & Alcohol Campaign*. Brisbane: Queensland Government.
- Queensland Government. (2015). The State of Queensland (Schoolies). Retrieved 23/03/2015, 2015, from <http://www.schoolies.qld.gov.au/>
- Raceday Etiquette. (2010). *Today*. Retrieved from <http://today.ninemsn.com.au/travelandlifestyle/317611/raceday-etiquette>
- Raciti, M., O'Hara, R. S., Bishnu, Reinhard, K., & Davies, F. (2013). Examining price promotions, venue and place of residence as predictors of alcohol consumption. *Journal of Social Marketing*, 3, 8-27. doi: 10.1108/20426761311297207
- Ratner, C. (2008). Cultural psychology and qualitative methodology: Scientific and political considerations. *Culture & Psychology*, 14(3), 259-288. doi: 10.1177/1354067x08088557
- Reflexgroup. (2011). Moet & Chandon Champagne. from www.moet.com

- Rehm, J., Mathers, C., Popova, S., Thavorncharoensap, M., Teerawattananon, Y., & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *The Lancet*, 373(9682), 2223-2233. doi: 10.1016/S0140-6736(09)60746
- Rhodes, R. E. (2014). Will the new theories (and theoreticians!) please stand up? A commentary on Sniehotta, Pesseau, and Araújo-Soares. *Health Psychology Review*(Journal Article), 1-8. doi: 10.1080/17437199.2014.882739
- Ringold, D. (1995). Social Criticisms of Target Marketing. *The American Behavioral Scientist*, 38(4), 578-592.
- Rise, J., Sheeran, P., & Hukkelberg, S. (2010). The Role of Self-identity in the Theory of Planned Behavior: A Meta-Analysis. *Journal of Applied Social Psychology*, 40(5), 1085-1105. doi: 10.1111/j.1559-1816.2010.00611.x
- Rivis, A., & Sheeran, P. (2013). Automatic risk behavior: Direct effects of binge drinker stereotypes on drinking behavior. *Health Psychology*, 32(5), 571-580. doi: 10.1037/a0029859
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11(1), 25-41. doi: 10.1080/14780887.2013.801543
- Robson, S. K. A., Kimes, S. E., Becker, F. D., & Evans, G. W. (2011). Consumers' responses to table spacing in restaurants. *Cornell Hospitality Quarterly*, 52(3), 253-264. doi: 10.1177/1938965511410310
- Roche, A., Bywood, P., Borlagdan, J., Lunnay, B., Freeman, T., Lawton, L., . . . Nicholas, R. (2008). Young people and alcohol: The role of cultural influences. Adelaide: National Centre for Education and Training on Addiction (NCETA).

- Rolfe, A., Orford, J., & Dalton, S. (2009). Women, alcohol and femininity: A discourse analysis of women heavy drinkers' accounts. *Journal of Health Psychology, 14*(2), 326-335. doi: 10.1177/1359105308100217
- Room, R., Babor, T., & Rehm, J. (2005). Alcohol and public health. *The Lancet, 365*(9458), 519-530.
- Rosenbluth, J., Nathan, P. E., & Lawson, D. M. (1978). Environmental influences on drinking by college students in a college pub: Behavioral observation in the natural environment. *Addictive Behaviors, 3*(2), 117-121. doi: [http://dx.doi.org/10.1016/0306-4603\(78\)90034-5](http://dx.doi.org/10.1016/0306-4603(78)90034-5)
- Rubin, A., Stout, R. L., & Longabaugh, R. (1996). Gender differences in relapse situations. *Addiction, 91*(Supplement), S111-S120.
- Rudolfstodir, A. G., & Morgan, P. (2009). 'Alcohol is my friend': Young middle class women discuss their relationship with alcohol. *Journal of Community & Applied Social Psychology, 19*(6), 492-505. doi: 10.1002/casp.999
- Rundle-Thiele, S. (2009). Bridging the gap between claimed and actual behaviour: The role of observational research. *Qualitative Market Research: An International Journal, 12*(3), 295-306. doi: 10.1108/13522750910963818
- Sancho, F. M., Miguel, M. J., & Aldás, J. (2011). Factors influencing youth alcohol consumption intention. *Journal of Social Marketing, 1*(3), 192-192-210. doi: 10.1108/20426761111170704
- Santrock, J. W. (2007). *Child development* (11th ed.). New York: The McGraw-Hill Companies, Inc.
- Saunders, J. B., Aasland, O. G., Babor, T., de la Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT). *Addiction, 88*, 791-804.

- Schippers, M. (2002). *Rockin' out of the box: Gender maneuvering in alternative hard rock*. London; New Brunswick, N.J: Rutgers University Press.
- Schippers, M. (2007). Recovering the feminine Other: Masculinity, femininity, and gender hegemony. *Theory and Society*, 36(1), 85-102. doi: 10.1007/s11186-007-9022-4
- Schluter, S. (2010, 2 November, 2010). Melbourne Cup frock fest, *Sydney Morning Herald*. Retrieved from <http://www.smh.com.au/photogallery/lifestyle/fashion/melbourne-cup-frock-fest-20101102-17b3l.html?aggregate=&selectedImage=0>
- Schroeder, D. A. (2010). Norms. In J. M. Levine & M. A. Hogg (Eds.), *Encyclopedia of Group Processes & Intergroup Relations*. Thousand Oaks, CA: SAGE Publications, Inc.
- Schulte, M. T., Ramo, D., & Brown, S. A. (2009). Gender differences in factors influencing alcohol use and drinking progression among adolescents. *Clinical Psychology Review*, 29(6), 535-547. doi: 10.1016/j.cpr.2009.06.003
- Schwartz, S. H. (1973). Normative explanations of helping behavior: A critique, proposal, and empirical test. *Journal of Experimental Social Psychology*, 9(4), 349-364. doi: 10.1016/0022-1031(73)90071-1
- Servo, D. K. (2008). *Theory of Planned Behavior constructs as mediators of behavior change associated with a brief alcohol intervention*. (1461167 M.S.), The University of Texas at El Paso, Ann Arbor. ProQuest Dissertations & Theses Full Text; ProQuest Dissertations & Theses Global database.
- Sheehan, M., & Ridge, D. (2001). "You become really close...you talk about the silly things you did, and we laugh": The role of binge drinking in female secondary students' lives. *Substance Use & Misuse*, 36(3), 347-372.
- Sheeran, P. (2002). Intention-behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1-36. doi: 10.1080/14792772143000003

- Shin, D.-H., & Kim, J. K. (2011). Alcohol product placements and the third-person effect. *Television & New Media*, 12(5), 412-440. doi: 10.1177/1527476410385477
- Shipherd, J. C., & Fordiani, J. M. (2014). The application of mindfulness in coping with intrusive thoughts. *Cognitive and Behavioral Practice*(0). doi: <http://dx.doi.org/10.1016/j.cbpra.2014.06.001>
- Shore, E. R., & Batt, S. (1991). Contextual factors related to the drinking behaviors of American business and professional women. *British Journal of Addiction*, 86, 171-176.
- Shweder, R. A., Goodnow, J. J., Hatano, G., LeVine, R. A., Markus, H. R., & Miller, P. J. (2006). The cultural psychology of development: One mind, many mentalities. In W. Damon & R. M. Lerner (Eds.), *The handbook of child psychology* (Vol. 1, pp. 716-792). Hoboken, NJ: John Wiley & Sons, Inc.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Singh, A. N. A., Singh, J., & Singh, A. D. A. (2011). Effects of a mindfulness-based smoking cessation program for an adult with mild intellectual disability. *Research in Developmental Disabilities*, 32(3), 1180-1185. doi: 10.1016/j.ridd.2011.01.003
- Single, E., Ashley, M. J., Bondy, S., Rankin, J., Rehm, J., & Dobbins, M. (2000). Evidence regarding the level of alcohol consumption considered to be low-risk for men and women. In NHMRC (Ed.). Canberra: NHMRC.
- Sinkinson, M. (2014). Having a good time: Young people talk about risk and fun when combining alcohol consumption and water activities. *International Journal of Health Promotion and Education*, 52(1), 47-55.
- Sky Spirits LCCC. (2011). Skyy Vodka. from <http://www.skyy.com/>
- Smith, G., Toadvine, J., & Kennedy, A. (2009). Women's perceptions of alcohol-related sexual disinhibition: Personality and sexually-related alcohol expectancies. *International Journal of Sexual Health*, 21(2), 119-131. doi: 10.1080/19317610902973241

- Smith, K. C., Twum, D., & Gielen, A. C. (2009). Media coverage of celebrity DUIs: Teachable moments or problematic social modeling? *Alcohol and Alcoholism*, 44(3), 256-260. doi: 10.1093/alcalc/agp006
- Smith, L. A., & Foxcroft, D. R. (2009). The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health*, 9, 1-11. doi: 10.1186/1471-2458-9-51
- Smith, P. H., Homish, G. G., Leonard, K. E., & Cornelius, J. R. (2012). Women ending marriage to a problem drinking partner decrease their own risk for problem drinking. *Addiction*, 107(8), 1453-1461. doi: 10.1111/j.1360-0443.2012.03840.x
- Sniehotta, F. F. (2009). An experimental test of the Theory of Planned Behavior. *Applied Psychology: Health and Well-Being*, 1(2), 257-270. doi: 10.1111/j.1758-0854.2009.01013.x
- Sniehotta, F. F., Plesseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health psychology review*, 8(1), 1-8. doi: 10.1080/17437199.2013.869710
- Snow, D. A., Robinson, C., & McCall, P. L. (1991). 'Cooling out' men in singles bars and nightclubs: Observations on the interpersonal survival strategies of women in public places. *Journal of Contemporary Ethnography*, 19(4), 423-449. doi: 10.1177/089124191019004003
- Sparks, P., & Shepherd, R. (1992). Self-Identity and the Theory of Planned Behavior: Assessing the role of identification with "Green Consumerism". *Social Psychology Quarterly*, 55(4), 388-399. doi: 10.2307/2786955
- Stankiewicz, J., & Rosselli, F. (2008). Women as sex objects and victims in print advertisements. *Sex Roles*, 58(7), 579-589. doi: 10.1007/s11199-007-9359-1
- Stenhouse, L. (1981). What counts as research? *British Journal of Educational Studies*, 29(2), 103-114. doi: 10.2307/3120018

- Stockwell, T., Donath, S., Cooper-Stanbury, M., Chikritzhs, T., Catalano, P., & Mateo, C. (2004). Under-reporting of alcohol consumption in household surveys: A comparison of quantity–frequency, graduated–frequency and recent recall. *Addiction*, 99(8), 1024–1033. doi: 10.1111/j.1360-0443.2004.00815.x
- Szmigin, I., Griffin, C., Mistral, W., Bengry-Howell, A., Weale, L., & Hackley, C. (2008). Re-framing 'binge drinking' as calculated hedonism: Empirical evidence from the UK. *International Journal of Drug Policy*, 19, 359–366. doi: 10.1016/j.drugpo.2007.08.009
- Tabachnick, B., & Fidell, L. (2001). *Using multivariate statistics* (4 ed.). Needham Heights, Massachusetts: Allyn and Bacon.
- Taylor, N., Prichard, J., & Charlton, K. (2004). National project on drink spiking: Investigating the nature and extent of drink spiking in Australia. . Canberra: Australian Institute of Criminology.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks: Sage Publications.
- Teddlie, C., & Tashakkori, A. (2010). Overview of contemporary issues in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social and behavioral research* (2 ed., pp. 1–45). Thousand Oaks, CA: SAGE Publications, Inc.
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776–793. doi: 10.1177/0146167296228002
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *The British Journal of Social Psychology*, 38, 225–244.

- Testa, M., & Livingston, J. A. (2009). Alcohol Consumption and Women's Vulnerability to Sexual Victimization: Can Reducing Women's Drinking Prevent Rape? *Substance Use & Misuse*, 44(9-10), 1349-1376. doi: doi:10.1080/10826080902961468
- The ABAC Scheme. (2011). The ABAC Scheme - Annual Report 2010: The ABAC (Alcohol Beverages Advertising Committee) Scheme.
- Thorn, M. (2014). Stemming the Tide of Alcohol. Retrieved from <http://drinktank.org.au/2014/08/stemming-the-tide-of-alcohol/>
- Too hot to trot - Melbourne Cup race wear 2010. (2010, 24 September 2010). *Sunshine Coast Daily*.
- Toumbourou, J. W., Williams, I. R., Snow, P. C., & White, V. M. (2003). Adolescent alcohol-use trajectories in the transition from high school. *Drug and Alcohol Review*, 22(2), 111-116. doi: 10.1080/09595230100100534
- Treno, A. J., & Lee, J. P. (2002). Approaching alcohol problems through local environmental interventions. *Alcohol Research and Health*, 26(1), 35-40.
- Tsang, J. (2002). Moral rationalization and the integration of situational factors and psychological processes in immoral behavior. *Review of General Psychology*, 6, 25 -50.
- Unger, J. B., Schuster, D., Zogg, J., Dent, C. W., & Stacy, A. W. (2003). Alcohol advertising exposure and adolescent alcohol use: A comparison of exposure measures. *Addiction Research and Theory*, 11(3), 177-193. doi: 10.1080/1606635031000123292
- Urban Dictionary. from <http://www.urbandictionary.com/define.php?term=cadbury>
- Valente, T. W., Ritt-Olson, A., Stacy, A., Unger, J. B., Okamoto, J., & Sussman, S. (2007). Peer acceleration: effects of a social network tailored substance abuse prevention program among high-risk adolescents. *Addiction*, 102(11), 1804-1815. doi: 10.1111/j.1360-0443.2007.01992.x

Van Horne, B. S., Wiemann, C. M., Berenson, A. B., Horwitz, I. B., & Volk, R. J. (2009).

Multilevel predictors of inconsistent condom use among adolescent mothers. *American Journal of Public Health*, 99(S2), S417-S424.

Virokannas, E. (2011). Identity Categorization of Motherhood in the Context of Drug Abuse and Child Welfare Services. *Qualitative Social Work*, 10(3), 329-345. doi:

10.1177/1473325011408480

von Haeften, I., Fishbein, M., Kasprzyk, D., & Montano, D. E. (2001). Analyzing data to

obtain information to design targeted interventions. *Psychology, Health & Medicine*, 6, 151-164. doi: 10.1080/13548500120035409

Walker, L. (2009, 29/10/2009). Show your best form on cup day, *City North News*.

Walsh, S. P., & White, K. M. (2007). Me, my mobile, and I: The role of self- and prototypical identity influences in the prediction of mobile phone behavior. *Journal of Applied*

Social Psychology, 37(10), 2405-2434. doi: 10.1111/j.1559-1816.2007.00264.x

Wang, C., Xue, H., Wang, Q., Hao, Y., Li, D., Gu, D., & Huang, J. (2014). Effect of drinking on all-cause mortality in women compared with men: A meta-analysis. *Journal of*

Women's Health, 23(5), 373-381.

WebMediaBrands Inc. (2011). Ads of the World.

Wellen, J. M., Hogg, M. A., & Terry, D. J. (1998). Group norms and attitude-behavior

consistency: The role of group salience and mood. *Group Dynamics: Theory, Research, and Practice*, 2(1), 48-56. doi: 10.1037/1089-2699.2.1.48

Wells, B. E., Kelly, B. C., Golub, S. A., Grov, C., & Parsons, J. T. (2010). Patterns of alcohol consumption and sexual behavior among young adults in nightclubs. *American Journal of Drug & Alcohol Abuse*, 36(1), 39-45. doi: 10.3109/00952990903544836

- Wetterling, T., Veltrup, C., Driessen, M., & John, U. (1999). Drinking pattern and alcohol-related medical disorders. *Alcohol and Alcoholism*, 34(3), 330-336. doi: 10.1093/alcalc/34.3.330
- WHO. (2000). *International guide for monitoring alcohol consumption and related harm*. Geneva: Department of Mental Health and Substance Dependence, Noncommunicable Diseases and Mental Health Cluster, World Health Organization.
- WHO. (2005). Alcohol Use and Sexual Risk Behaviour: A Cross-Cultural Study in Eight Countries (Department of Mental Health and Substance Abuse, Trans.). Geneva: World Health Organization.
- WHO. (2009). Fact sheet on women's health (Western Pacific Region): Women and alcohol/substance abuse. http://www.wpro.who.int/media_centre/fact_sheets/fs_20091111.htm
- WHO. (2014). Global Status Report on Alcohol and Health, 2014. Geneva, Switzerland.
- Wiers, R. W., Bartholow, B. D., van den Wildenberg, E., Thush, C., Engels, R. C. M. E., Sher, K. J., . . . Stacy, A. W. (2007). Automatic and controlled processes and the development of addictive behaviors in adolescents: A review and a model. *Pharmacology, Biochemistry and Behavior*, 86(2), 263-283. doi: 10.1016/j.pbb.2006.09.021
- Winzenreid, J. E. (2009). *Exploring cultural norms and behaviors that define an ethical environment in charitable nonprofit organizations*. (D.B.A. 3386845), Lawrence Technological University, United States -- Michigan. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/305056559?accountid=13380> ProQuest Dissertations & Theses (PQDT) database.
- Witkiewitz, K., Marlatt, G. A., & Walker, D. (2005). Mindfulness-based relapse prevention for alcohol and substance use disorders. *Journal of Cognitive Psychotherapy*, 19(3), 211-228. doi: 10.1891/088983905780907522

- Wood, W., Christensen, P. N., Hebl, M. R., & Rothgerber, H. (1997). Conformity to sex-typed norms, affect, and the self-concept. *Journal of Personality and Social Psychology*, 73(3), 523-535. doi: 10.1037/0022-3514.73.3.523
- Wright, C. A. (2003). *Beyond the ladies lounge: Australia's female publicans*. (Dissertation/Thesis), Melbourne University Press, Carlton., Victoria. Retrieved from <http://qut.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwY2AwNtIz0EUrEyzMjVPMLIwNkpINUoA1SHIisNY3Mk2zNDJINDG3SE0jbvwNsYQfMYRhCWwfmJqj7uRgZmA2MzWE7-cwALYxLEDtHIPoiTswvgHy9j5wheImyMDjgiQRLsTAIJonzMAJ2yVcLMIgAdlaogBsnynkgJZlFSvkgDJmqiiDjJtriLOHLtDIeOjgSzzMgeZGYgy8iaBF63kl4M1tKRIMCklmxolJFsAGgWGyhYklKHRMkpNMQfeAJRsbGqUaSjKIYjVLCoe4NAMXeK0ZeIRAhoE1DZiCU2XBfgQAF0ZtCg>
- Yardley, L. (2007). Dilemmas in qualitative health research. *Psychology & Health*, 15(2), 215-228. doi: 10.1080/08870440008400302
- Young, L. (2011). Joe Sixpack: Normality, deviance, and the disease model of alcoholism. *Culture and Psychology*, 17(3), 378-397.
- Yu, M., & Stiffman, A. R. (2010). Positive family relationships and religious affiliation as mediators between negative environment and illicit drug symptoms in American Indian adolescents. *Addictive Behaviors*, 35(7), 694-699.

Appendices

Appendix A - NHMRC (2009) Guidelines

Guideline 1 - Reducing the risk of alcohol-related harm over a lifetime

The lifetime risk of harm from drinking alcohol increases with the amount consumed.

For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury. (p.2)

Guideline 2 - Reducing the risk of injury on a single occasion of drinking

On a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed.

For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion. (p.3)

Guideline 3 - Children and young people under 18 years of age

For children and young people under 18 years of age, not drinking alcohol is the safest option.

A Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important.

B For young people aged 15–17 years, the safest option is to delay the initiation of drinking for as long as possible. (p. 4)

Guideline 4 - Pregnancy and breastfeeding

Maternal alcohol consumption can harm the developing foetus or breastfeeding baby.

A For women who are pregnant or planning a pregnancy, not drinking is the safest option.

B For women who are breastfeeding, not drinking is the safest option. (p.5)

Appendix B: World Health Organisation (WHO) fact sheet

Fact Sheet on Women's Health (Western Pacific Region) 11 November 2009

Women and alcohol/substance abuse

Women are more likely to abstain from alcohol than men.

- In Western Pacific A countries (i.e., Australia and Japan), 77% of women are current drinkers (87% of men).
- In Western Pacific B countries (i.e., China, the Philippines and Viet Nam), 30% of women are drinkers (84% of men).
- Men are more than twice as likely to report both heavy episodic drinking (binge drinking) and chronic heavy drinking. However, gender gaps are smaller among late adolescents and expected to decrease in WPR B countries in the future.

Country data

- Viet Nam: 0.6% females rate as heavy drinkers (5.7% of males)
- Lao PDR: 1.8% females rate as heavy drinkers (3.8% of males)
- Japan: 4.9% females rate as heavy drinkers (22.7% of males)
- Australia: 7.2% females rate as heavy drinkers (6.7% of males)
- China: 0.3% females binge drink (7.5% of males)
- Philippines: 1.6% females binge drink (13.2% of males)
- China: 0.2% of females are alcohol dependent (6.6% of males)
- Singapore: 0.2% of females are alcohol dependent (1.1% of males)

Even women who do not drink to excess face more problems than their male counterparts:

- Women who drink run the risk of getting breast cancer and that risk is directly related to the amount of alcohol they consume.
- Females face more brain damage and memory loss than men who drink the same amount for the same period of time.
- Women not only get drunk on less alcohol than men but they also suffer worse hangovers.
- Compared to boys and men, girls and women become addicted to alcohol, nicotine and illegal and prescription drugs, and develop substance-related diseases at lower levels of use and in shorter periods of time.
- Young drug users, whether they are injection users or not, are at a high risk of contracting herpes simplex virus 2 and syphilis. Women are significantly more prone to develop sexually transmitted infections than their male drug-using counterparts.
- Women who have more than 15 drinks a week have an increased risk of experiencing mental illness, specifically depression and anxiety.
- Female alcoholics experience more severe cardiovascular effects from heavy alcohol drinking than those observed in male alcoholics and these effects are noted at an earlier stage of drinking and at a lower consumption level than those noted in men.
- Liver cirrhosis develops faster in women.
- Binge drinking increases risky sexual behaviour, particularly in women
- Women who are married to alcoholics are three times more likely to abuse alcohol themselves, compared to wives of non-alcoholics.
- Alcohol and drug use during pregnancy may have severe repercussions for the child.

http://www.wpro.who.int/media_centre/fact_sheets/fs_20091111.htm

Appendix C – Study 2 – Interview Script

Interview Script

| | |
|--|--|
| Interviewee (<i>First name only</i>) | |
| Interviewer (<i>First name only</i>) | |
| Date | |
| Time | |
| Where did you hear about the research? | |

Thank person for calling and briefly inform her of what is required from participants.
e.g., Did you want to know more about the research or were you interested in being a participant?

Read aloud... *This research will examine how and why women drink alcohol. Particularly, we are interested in how attitudes and values influence women's drinking and, also, how cultural factors may influence attitudes and behaviours around alcohol consumption. We are conducting this research because, on the whole, women are drinking at a much higher rate than previous generations. If you decide to participate, we can arrange a time that is convenient for you to have talk over the phone. In recognition of your contribution, you will receive a \$20 gift voucher. The interview will consist of some general questions and then two short surveys. We anticipate that this whole interview would take approximately 1 hour of your time.*

The interview will need to be recorded so that I'm not relying on my memory. All information is confidential and your participation is anonymous. No names will be disclosed and once the audiofile is transcribed to paper format, it will be destroyed. We may ask for your name and some contact details to send information or the gift card, but all names and contact details are kept separate from the responses when you take part in the actual interview. We phone you so that the call charges are at our expense and not yours – if you are comfortable with this.

Does this sound like something you would be interested in taking part in?

Please tick response...

- ☐ YES – go to screening interview
- ☐ NO – **if no then read this section aloud...** *“That is OK. We thank you for calling us and querying about participating in the project. If you want to know any more information, then feel free to contact us again.”*

YES → Read aloud... *“Ok - great. Well, before we proceed we need to make sure that we*

have women of a range of ages. So, firstly, could you tell me how old you are please?”

18 – 24 years old.....

25 – 34 years old.....

35 – 50 years old.....

Great. To meet ethical standards requirements, I need to send you an information sheet that gives you more information about the study, your rights and some contact details etc.

Is it possible for me to email it to you and then, once you have read through this, we can do the interview?

[Record name and contact details on Participant list – for sending gift voucher too]

Interview Commencement

Have you had a chance to read the informed consent sheet that I sent you?

Do you have any questions?

Are you still happy to go ahead with the interview?

If Yes: “Okay, great. In a moment I will turn on the recording device and you will hear an automated voice recording saying that this is the case.”

[Turn on recording]

“Thank you for agreeing to participate in this valuable research. To start off, I just want to remind you that there are no right or wrong answers, and your responses are all confidential, so you can speak freely. The questions are open-ended so feel free to provide any information or stories that you may find relevant. Do you have any any questions before we begin?”

Question 1/ Women describe varying amounts and times that they drink alcohol. Some women report drinking every day with friends or family. Some only drink alcohol on certain occasions. For instance, one woman may drink a few glasses of wine every night with her partner, just to unwind. And then on the weekend she frequently goes out to dinner with friends and shares a bottle of wine. Some women also describe drinking while they get ready to go out every Friday and Saturday and then some more when they're out at nightclubs.

Thinking about times when you drink alcohol. In your own words, please tell me about those times.

1a/ What sorts of activities involve alcohol for you?

1b/ Is there a particular occasion/ event that you would find it hard to resist drinking, if so when or what?

1c/ Do you normally drink with the same people?

If yes, then "Who do you drink with most regularly?"

1d/ What do you drink?

Is there a reason that you choose to drink.....(*that sort of alcohol*) – *reframe* for them – so if they drink wine, then say wine. If they drink beer, then say beer?

Question 2/ There's a whole range of reasons women say they drink. For instance, sometimes to celebrate, to relax, to help conversation... a whole range of reasons. What are some of the reasons **you** drink?

(If struggle with this question, then, "Are there certain things that trigger/ prompt you to drink? If so, what sort of things?")

2a/ Some women report feeling happy and relaxed or some say that they end up feeling sad when they drink. How do you feel when you drink? What sort of emotions do you experience?

2b/ Sometimes women report feeling like a drink when they see billboards or advertising showing women relaxing or partying with a glass of champagne etc. Does the media or advertising influence your drinking in any way and if so how?

PROMPT: What example/s of alcohol advertising can you recall?

Question 3/ Is there anything that has changed your usual drinking habits either recently or over the years since you first started drinking?

If Yes, What might that be?

Question 4/ Some people say that their alcohol consumption is influenced by others in a variety of ways. So for example, if everyone at a BBQ is drinking a lot, then I may find myself drinking more OR conversely, if someone says that I should drink less, then I may be more careful. Some women say that their drinking increases when they are with their partner or friends, whilst when they are with their families they may slow down their drinking. Again, there is no right or wrong answer.

4a/ What people in your life most influence your drinking?

Prompt – Either promote or inhibit your drinking?

4b/ Some women describe a feeling of being out of place or not included if they are not drinking and the people around them are. Have you ever felt that?

If Yes, then, “What was that like? Please can you tell me more about that?”

If no, then 4c

4c/ What do you remember about your parent’s (especially your mother’s) drinking?

Prompt - Are there any family stories about alcohol that have been told?

Question 5/ Are there particular special occasions or celebrations when alcohol plays a part?

If yes, then, “Why do you think that alcohol is a part of that celebration?”

If struggling with answer, “How important is it that alcohol is part of that celebration?”

5a/ On such special occasions, do both family and friends celebrate with you?”

Question 6/ Generally, what is your friends’ / partner’s drinking like?

6a/ Some people describe doing things when they’ve been drinking that they wouldn’t normally do. For instance, some report being friendlier than normal or being more aggressive when they drink or just saying things that they wouldn’t normally say when they drink alcohol. Are there things that they do when they’re drinking that they wouldn’t normally do? What sort of thing?

If YES and provide examples: “What do you think about that sort of “behaviour”?”

6b/ Have you ever had arguments with friends/ family about **their** drinking?

If Yes, then, “If it’s okay, can you tell me a little about that?”

If no, then next question

Question 7/ How about you? Are there things that you do when you are drinking, that you wouldn’t normally do?

If Yes, then, “What sort of thing? Please can you tell me more about that?”

If no, then next question

7a/ Have you ever had arguments with friends/ family about **your** drinking?

If Yes, then, “If it’s okay, can you tell me a little about that?”

If no, then next question

Question 8/ What sorts of things influence **where** you normally drink?

Prompt: For example, what sort of atmosphere or environment are you looking for?

8a/ What places don’t you like to drink at and why might that be?

Question 9/ It’s been observed that women dress in a range of ways depending on where they’re going. How do you decide what to wear when you go out drinking?

9a/ What do you think about?

9b/ Is there a message that you want to give to others by dressing a certain way? If so, what is it?

Possible prompt e.g., if they talk about psychosocial intentions → “So how is drinking a part of that?”

Question 10/ When talking about going out, some young women discuss how men sometimes approach them and start talking. Has this ever happened to you?

Prompt: “Either recently or when you were younger?”

If they talk about current, then can ask, “What about when you were younger?”

If Yes, then, “What happened and how did it make you feel?”

If no, then next question.

Prompt [IF unwanted attention described..] – Some women describe a sense of obligation to be polite to the man approaching, but at the same time try and signal their disinterest. Have you ever felt that?

If Yes, then, “Please can you tell me about that? What did you do?”

Question 12/ Some women say that they get drunk without realising it or intending to. What signs are important to you that mean that you may have had too much to drink?

12a/ Do you have any strategies to stop drinking before you get to this point? If so, what?

12b/ During a drinking occasion, is there somewhere that you might go to regroup or possibly even have some time out from drinking?

PROMPT: Is there a regular place / time when you realise that you may have had too much to drink?

12c/ Are there particular times that you try not to drink?

If Yes, then, “What are they and why?”

If no, then next question

Question 13/ This is the last question for this section. Thinking about all that we have discussed so far, how do you think that your drinking behaviours and attitudes compare to your mothers?

Prompt: What is different and why do you think that is?

Prompt: Can you give any examples of how your mother's attitudes around drinking may differ to yours?

“Is there anything that you would like to add before we go on to the two brief surveys?”

Okay, I just need to remind you that your responses are all strictly confidential.”

| Box 4 The Alcohol Use Disorders Identification Test: Interview Version Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks". Place the correct answer number in the box at the right. | |
|--|--|
| 1. How often do you have a drink containing alcohol? (0) Never [Skip to Qs 9-10] (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week | 6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily |
| 2. How many drinks containing alcohol do you have on a typical day when you are drinking? (0) 1 or 2 (1) 3 or 4 (2) 5 or 6 (3) 7, 8, or 9 (4) 10 or more | 7. How often during the last year have you had a feeling of guilt or remorse after drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily |
| 3. How often do you have six or more drinks on one occasion? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily <i>Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0</i> | 8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily |
| 4. How often during the last year have you found that you were not able to stop drinking once you had started? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily | 9. Have you or someone else been injured as a result of your drinking? (0) No (2) Yes, but not in the last year (4) Yes, during the last year |
| 5. How often during the last year have you failed to do what was normally expected from you because of drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily | 10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down? (0) No (2) Yes, but not in the last year (4) Yes, during the last year |
| Record total of specific items here <i>If total is greater than recommended cut-off, consult User's Manual.</i> | |

11. How often do you have four or more drinks on one occasion? 0 – Never

1 – Less than monthly

2 - Monthly

3 – Weekly

4 – Daily or almost daily

(Babor et al., 2001)

DEMOGRAPHIC INFORMATION:

| | |
|--|---|
| <p>1. What is the highest level of education that you have completed? (please tick one)</p> | <p>Primary school 1</p> <p>Junior 2</p> <p>Secondary school..... 3</p> <p>Diploma/Degree 4</p> <p>University – undergraduate 5</p> <p>University – postgraduate 6</p> |
| <p>2. What is your current employment status? Can be more than one category. (Tick all that apply)</p> | <p>Unemployed/ Home-maker 1</p> <p>Student..... 2</p> <p>Casual worker..... 3</p> <p>Part-time worker..... 4</p> <p>Full-time worker 5</p> <p>Retired..... 6</p> |
| <p>3. What is your usual casual/part-time /full-time occupation?</p> | <p>Labourer.....1</p> <p>Machinery Operator/ driver.....2</p> <p>Sales workers.....3</p> <p>Clerical/ Administrative worker.....4</p> <p>Community & personal service worker....5</p> <p>Technicians/ Trades/ Hospitality.....6</p> <p>Professionals.....7</p> <p>Managers.....8</p> <p>Student.....9</p> <p>Other.....10</p> |
| <p>4. What is/ was your father's main occupation?</p> | |

| | |
|---|--|
| 5. What is/ was your mother's main occupation? | |
| 6. What is your marital status? | Single.....1 In a relationship, not living together.....2 Defacto/ Married.....3 Divorced/ Separated.....4 Widow.....5 |
| 7. Do you have any children? If so, how many and what are their ages? | |
| 8. Who do you live with? | No one, I live alone.....1 With my dependent children.....2 With parents/ family.....3 With partner & no dependent children.....4 With partner and dependent children.....5 With friends/ flatmates.....6 Other.....7 |
| 9. What is your gross weekly household income in Australian dollar (AUD)? [Annual estimates] 9a. How many people would be contributing to this income estimate? | 0 -\$99 [0-5200pa].....1 100-400 [5201-20800]2 401-800 [20 801-41 600]3 801-1200 [41 601-62 400]4 1201-1600 [62 401-83 200]5 1601-2000 [83 201 -104 000].....6 2001-3000 [104 001-156 000]7 3001+ [156 001+]8 |
| 10. What is your postcode and suburb? | |

*Thank you for your participation. Your gift voucher will be sent to you shortly. **If you know of any other women who might like to participate, please do not hesitate to give them my contact details.***

Appendix D: Study 1 - Observation Descriptors including Level 1 Interpretations

| Observation 1- Friday 13 August, 2010 – Fridays NightClub | | |
|---|--|---|
| Arrived – 7pm | <ul style="list-style-type: none"> • Bouncer on stairs checking patrons' ID and/or dress (presumably for latter) • No cover charge when entered (Cover charge by time we left around 10.30) • Found a table with 4 chairs on the “verandah/balcony area” . • People lining up at the automatic teller machine at the bottom of the stairs (both when researchers enter and exit) | Policing/ security Formal romantic mood Accessibility |
| Physical Setting | <ul style="list-style-type: none"> • Balcony area with tables and chairs and brasserie (sp?) heaters. • Dim lighting (Mood lighting) & “fairy lights” in centre-piece tree arrangement • Inside area with lounges and long tables and carpeted, dance floor and DJ area, with high bar tables and bar stools. 3 Large screen televisions with a rugby league match on (no volume). • Music playing in the background. Background music modern but somewhat mellow. - No dancing - DJ • Five bars serving alcohol and one “bar” serving food. (Initially 3 bars busy, but not crowded and 2 bars quiet) • Most tables occupied – “Faux” candles on most tables. • Advertisements for half-price cocktails every evening between 5-7pm on most tables | Visual stimuli - sport Music → Atmosphere Accessibility Marketing/ Alcohol promotion |
| Clientele | <ul style="list-style-type: none"> • Some groups mixed genders and some all women and some all men (about 1/3 each) • Majority of people 25 to 35 years old – This age appears to drop by about 9pm when dancing and music changes to lower about 25 years old average • Most women have long or shoulder length hair. • Most people were in groups of 4 to 6. In Business and smart casual. - Some “party” clubbing attire. • Women appear conscious of how they look and walk etc | Assumptions are – that most knew each other from a work context. Femininity Awareness of appearance (Representations of femininity – Day,2010) – |

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| | | |
|---|--|---|
| | | "performative element of club culture" Measham (2002,p. 355) |
| Services/ Food/ Beverages/ Entertainment | <ul style="list-style-type: none"> Food is served bw \$10 to \$32 3 wine/ drinks menus on the bars – all alcoholic beverages – no non-alcoholic drinks advertised. When asked, the only non-alcoholic beverage is juice (\$5) Beers (light) start at \$5 per bottle Wine between \$8 and \$12 ??cocktails or spirits price Disc Jockey (DJ) | Food/ Alcohol match Accessibility – Cheap drinks Marketing/ Alcohol promotion Marketing/ Alcohol promotion Music → Atmosphere |
| 7.15pm | <ul style="list-style-type: none"> Women in small groups arriving Not much interacting between groups Bouncers, "glassies" and waitrons moving about. Much talking → No shouting Men drinking beer; - Lots of women drinking cocktails Some women carrying / with 2 cocktails each – "stocking up" (to get in before happy hour stops) | Policing / Security Social inhibitions - decreased Accessibility – Cheap drinks |
| 7.30pm | <ul style="list-style-type: none"> Waiting for meal? with 2 half full glasses – Waitron asks "Are you all right for drinks?" Initial Observation - Intoxification could only be guessed by increased animation and gesticulations. And slightly more physical contact than sober or other contexts | Alcohol promotion Accessibility Policing / Security |

| | | |
|------------------------|--|--|
| | <ul style="list-style-type: none"> • 2 x bouncers | |
| 8pm | <ul style="list-style-type: none"> • Music gets louder and more techno (slightly) – faster more bass • Incident 1 – Young woman confronts “glassie” about a missing drink “Was collected by glassie before it was finished.” Woman appeared irritated but was civil and resulted in peaceful resolution (glassie talking to bar tender). Stranger interfered mid-conversation, loudly (joking) claiming to have lost a “huge” beer. (IE can he get one free too) | <p>Music → Atmosphere</p> <p>Accessibility</p> <p>Psychosocial (Social norms “broken” in this context.</p> <p>Social inhibitions - decreased</p> |
| Visit to toilet – 1 | <ul style="list-style-type: none"> • Female attendant outside female toilet – moved inside to check toilet paper | |
| General | “Glassies” – diligent | <p>either too many “glassies”</p> <p>and bored or have been</p> <p>put there to collect glasses</p> <p>as soon as they are empty</p> <p>or close to it – Alcohol</p> <p>promotion?</p> |

Appendix E: Study 1 – Description of Venues/ Events

| # | Venue/ Event | Location | Date | Time | Description |
|---|---|-------------------------|----------|-------------------|---|
| 1 | A city nightclub/ Regular Friday night | Brisbane City | 13/08/10 | 7pm – 10.30pm | Waterfront nightclub central to the CBD and financial district. Attracts young professionals. 5 bars, 1 food bar, 3 TVs, 1 dance floor, 5 types of sitting/ spaces, DJ |
| 2 | A tavern/ National Rugby League (NRL) final | Paddington, Brisbane | 24/09/10 | 8.30 – 10.30pm | Inner suburban hotel/pub near to the live football game. Attracts people attending the game or wanting to watch. Decorated in celebration of the match. 2 bars, 2 food serveries (1 formal dining and 1 casual dining) – restaurant closed for the NRL event, 4 types of sitting/spaces, live band after the game |
| 3 | Nightclubbing area/ Regular Saturday night | Fortitude Valley | 9/10/10 | 10.30pm – 1am | Two main streets lined with cafes, bars, nightclubs & restaurants. Main observation took place in the mall = One side of the mall has cafes and restaurants, other side has bars/ nightclubs. Most bars/ nightclubs appeared to have 3 spaces (lower inside, outside & upstairs nightclub/dance venue). Most with TVs showing either sport or music videos. Some with DJs and some with live music. One end of mall has a relatively new police station & public toilets. |

| | | | | | |
|---|--|--|----------|-------------------|---|
| 4 | Racecourse/ Melbourne Cup Day | Eagle Farm | 2/11/10 | 10am – 5pm | Racecourse – Stalls set up with food, approx 6 marquees for dining, drinking & fashion show; 1 make over stall; 1 vodka tasting stall; tote (betting) stalls, terraced corporate boxes; over 11 alcohol service points; TVs in all areas to watch the main race |
| 5 | Surfers Paradise/ Schoolies | Schoolies site & Surroundin g streets | 26/11/10 | 6pm – 1am | Temporary stage on the beach with live entertainment. Tents/ stalls with support such as ambulance service, Drug Arm, police vans etc line the beach access area. Surrounding streets and main mall normally inhabited by tourists have many schoolies milling around. A number of businesses (e.g., cafes/ restaurants, hotels) close down and erect temporary barricades to their property for the week (evidence and discussion with cafe owner) |
| 6 | City nightclub/ Clubbed themed night | Brisbane City | 27/11/10 | 10pm – 11.30pm | Nightclub - Central city location under backpacker accommodation. Only one other night club on that street. Pub on ground level and nightclub in basement. 4 types of sitting/spaces including a dining area that was empty, dance floor, 2 bars, 2 TVs in back bar where main observation took place, DJ |
| 7 | Fortitude Valley/ Regular Saturday night | Fortitude Valley | 27/11/10 | 11.45pm – 1am | As for Venue 2. |

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Appendix F: Study 1 - Observation Summaries across Venue/Events

| | 1/Friday – City nightclub | 2/ Inner city pub | 3/ Saturday – Fortitude Valley |
|---|---|--|--|
| Cultural Events | After work – Friday night | National Rugby League (NRL) Grand final | No event, but groups engaged in hen's nights or birthday celebrations |
| Media | Online advertising; Facebook page | Facebook page | Various clubs with online advertising & Facebook |
| Marketing | Advertisements on most tables for half-price cocktails every evening between 5-7pm; Staff often ask if a drink is "needed"; Commercialisation of fun | Advertisements for upcoming comedy nights | Billboard advertising hen's night functions; alcohol advertising within each venue; Commercialisation of fun |
| Policy effects inc security/ legislation | Bouncers checking ID; availability of ATM at door; no cover charge initially, but by 10.30pm when observers leaving there is a cover charge; Women in workforce; women in public bars | Approx. 2 bouncers initially (≈ 8.30pm), but increased to about > 6 by the time the game completed Plastic glasses for grand final night | Bouncers at each venue, police presence; Cafe's and licensed venues along one strip open until morning; pizza cafe has breathalyser vending machine; |
| Venue – Physical surroundings etc | Balcony area with tables, chairs and heaters.; Dim lighting (Mood lighting); Inside area with lounges and long tables and carpeted, dance floor and DJ area, with high bar tables and bar stools. 3 Large screen televisions with a rugby league match on (no volume). Music playing in the background initially. Louder faster music starts approx 9pm - DJ Five bars serving alcohol and one "bar" serving food. (Initially 3 bars busy and 2 bars quiet) | Outside area with high tables/ stools; 3 inside sections – Pool area. casual and formal dining; Decorated with local team colours; No music whilst the NRL game was on, but after game music and live band; Majority of the 6 TVs had the NRL game on and one had 'endurance' sport; Bar staff wearing cowgirl/cowboy costumes. Female staff = cowgirl hats & low cut tops | Variety of venues and eating establishments catering to a nightclub environment line the street. E.g., cheap, ready-to-eat pizza outside the clubs Most venues have sit down area downstairs and dancing upstairs. All have large video screens with music videos or sports playing. |
| Family/ Peer | Appeared to be in groups – dress indicated groups of office workers Later different groups of peers and partnered people | Small groups of peers. After the game, couples arrived from the stadium. | <u>Mostly groups of peers</u> , Some couples and groups with family members oft including celebrations of hens nights or birthdays |
| Description of clientele/ | Initially mixed age- Majority (bw 25 & 35) and mostly business / smart casual and some patrons in party attire. | Mixed age (bw 25 & 40); Majority male clients – approx = 5:1= Men:Women | Mixed ages (mainly 18 to 35 years old); Mixed appearances/ dress indicating differing subcultures. E.g., in English pub people |

| | | | | | | |
|---|--|--|---|--|------------------------------|--|
| patrons (age/ dress) | By approx 9pm the majority of patrons were under 30 years old (∞ 25yo) and dressed in ‘nightclub’ party wear | | Mostly casual dress, apart from a group of women who are smart casual Influx of people coming from the live match | in suits and people with dreadlocks and long hair. Majority of women wearing short ‘bandage’ dresses that constantly ‘needed’ adjusting; Costumes = hen’s badges, sashes – hens, groom, lederhosen = Commercialisation of fun | | |
| Overall Behavioural trends | Change from quiet talking (∞ 7pm) to exaggerated movements and gesticulations and to decreased personal space and increased physical contact; No-one dancing (∞ 7pm) to dancing on the spot in one’s own space to dance floor; Many women self-conscious/ aware of their appearance e.g., increased preening, walking in a particular way, discussions in the toilet Photos taken with mobile phones of groups drinking/ “partying” Toilets a place for women to groom, discuss potential relationship issues and generally “take stock” | | Mostly quiet behaviour whilst the game is being televised. Male behaviour more overt than female e.g., men faux tackling in greeting. Pool playing starts after game concludes | Women drinking more variety of alcohol including more beer drinking than the city venues.; Loud laughter, talking. Women walking along singing.; Men approaching and talking to, and/or calling out to researchers and to other women. Accused of being “fucking rude” if do not speak to them.; Much adjustment of clothing with women preening on streets and in toilets Discussions of vomiting as a result of high alcohol consumption in toilets; Discussions of relationship issues in toilets. | | |
| Cultural celebrations | Friday after working week – relax/ unwind Birthday celebrations | | NRL grand final = Popular national game Australia as sporting nation Changing from all male sport to inc female support | Marriage & bucks/ hens nights Coming of age birthdays Oktoberfest OR combining bucks & Oktoberfest celebrations | | |
| Women’s role | Women in public arena – working Feminine identity – dresses, awareness of appearance | | Women as spectators not players of sport | Hen – marriage – now party before wedding like bucks party Feminine identity – tight dresses; dress to attract | | |
| | | | | | | |
| | 4/ A Brisbane racecourse | | 5/ Surfers Paradise | | 6/ Saturday – City nightclub | 7/ Saturday – Fortitude Valley |
| Cultural | Melbourne Cup day | | “Schoolies” | | Regular Saturday – Nightclub | No specific event – small group celebrations |

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| | | | | |
|---|--|---|---|--|
| Events | | | event – “Ladies night” | – Evidence of nearby Octoberfest event |
| Media | Online advertising; Facebook page; news & magazine reports. Promoted as a National cultural event. Women being interviewed by TV reporter. | Facebook page; news reports. Previous negative media attention influences security levels and policy around alcohol consumption and event organising. | Online advertising; Facebook page | Various clubs with online advertising & Facebook |
| Marketing | Lots of alcohol advertising on table umbrellas, banners, behind stage with live band. C/F No advertising on cigarette stand.; On TV screens – car advertising, Women in ‘provocative’ clothing handing out flyers about nightclubs later in the day for people who want to go onto party | Official schoolies area = no alcohol advertising. Lots of shops advertising schoolies t-shirts. A block away cafes and nightclubs on one street with alcohol advertising. Commercialisation of fun | Staff with venue logo: “Full on Flat out”; Verbal & visual advertising \$4 cocktails & free cocktails at midnight for women; Small flags advertising beer and different countries | Commercialisation of fun Alcohol advertising Music/ live entertainment advertising Coffee/ food marketing |
| Policy effects inc security/ legislation | Legalisation of horse racing & alcohol Legislation- alcohol advertising permissible - cigarette advertising not permissible | Alcohol ‘ban’ at main musical event on beach. No alcohol advertising. State Government website.; Increased security and police presence, including plain clothed police officers.; Nearby licensed venues and bottle shops with young people carrying alcohol to hotels. Increased security in hotels. | Bouncer at the door checking ID | Establishments permitted to stay open throughout the night – Food and bars open Drink driving laws → money making vending machine Security / bouncers in or on most bars Police station in the mall – police presence |
| Venue – Physical surroundings etc | Licensed area - Tables & umbrellas for shade; grandstand; a number of bars and tote stands; various marquees – different costs and entertainment packages; Fashion on the Field area with make-up artists | Schoolies only area = no alcohol but entertainment Hotels, restaurants and nightclubs are the main surrounding businesses – Surrounding streets filled with young people socialising | Variety of seating – booths, stools and bars, dining. We sat on wet tshirt competition stand; Dance floor – DJ – 4 large TV screens with male | Accessibility of food, drink and entertainment – all within 5 minute walk Variety of venues, food sales and entertainment caters to a variety of tastes and interests |

| | | | | |
|---|---|--|--|--|
| | | | sport on | |
| Family/ Peer | Mostly groups of friends Some mixed aged groups = family or work groups | Mostly groups of friends - Absence of families (N=2) Peer support – support c/f entice to stay and party | Mostly friend groups. Support for woman stuck in the toilet. | Mostly groups of friends – Peer support – support c/f entice to stay and party |
| Description of clientele/ patrons (age/ dress) | Mixed age: mostly 20-40 yrs old, but also > 40 Mostly semi-formal dress – men and women Many women wearing hats/ fascinators; All but one wearing dresses; 1 group men wearing ‘silly mad-hatters’ hats – parody? | Mostly young school leavers. Some with Schoolies t-shirts that discussed alcohol or had their phone number printed on to facilitate social contact. Some groups of women wore the same style of clothing (e.g., denim mini shorts) | Not a variety of ‘types’. Some travellers. Mixed ages in men, but women mainly around 28yo or younger. Men:Women = approx 3or4: 1 –ladies night? | Different types of people – Majority still young, but more varied clothing/ images indicating different subcultures – e.g., alternative, conservative, gay people & older couples. |
| Overall Behavioural trends | People who may not normally bet, bet today Women preening and aware of appearance; as the day progresses and alcohol takes effect – people get louder, get less aware of appearance Lots of photo taking – inc shoes & man’s crotch | Milling around talking. Initially groups walking from bottle shops to hotels. As evening progressed louder and more animated behaviour. Increased aggression. Rarely observed a person on their own. Abuse at us due to age, after 9pm. | Mainly groups talking. Few dancing. One woman dancing ‘provocatively’. Men overtly walking around the room choosing women ‘to pick up’. | People in the streets being loud and talking to strangers. Nightclub/bars: Groups of people sitting drinking, talking and some dancing. Eating at cafes. People struggling to walk unassisted. |
| Cultural celebrations | National identity – Sporting nation = gambling Melbourne Cup Day – Fashions in the field; Spring Carnival | “Schoolies” = annual rite for high school leavers. Originating in Surfers Paradise – now other venues as a result of media coverage. | None – So venue creates one | Marriage & bucks/ hens nights Coming of age birthdays |
| Feminine identity | Women wear dresses to go semi-formal Fashion is primary role here | Short shorts = trendy, alluring & practical. Norm for women to drink & facilitate relationships | Awareness of appearance. Lots adjustment of hair/ clothes | Women supported by peers to drink.- Women as accessible & consumerable |

Appendix G: Study 1 – Examples of Venue Advertisements attracting Young Professional Women

The diagram illustrates two venue advertisements and their associated themes. The top advertisement, titled "what's on", features a woman in a black dress and the text "glamorous Cocktails at a glamorous Price 6-8 TUESDAY - SATURDAY". Annotations point to "Feminine identity includes glamorous cocktails" and "Alcohol promotion (Happy hour)". The bottom advertisement, also titled "what's on", features a woman in a red dress with balloons and the text "Gatherings Birthdays Engagements School Reunions Christmas Soirées & really Great Parties!". Annotations point to "Feminine, class identity", "Feminine identity includes partying", and "Feminine, class identity". A "Website" box points to "com.au". A "Micro-Celebrations" box points to the bottom advertisement. A red text box at the bottom right says "Inquire about holding your SPECIAL EVENT at".

what's on

glamorous Cocktails at a glamorous Price 6-8 TUESDAY - SATURDAY

Feminine identity includes glamorous cocktails

Alcohol promotion (Happy hour)

Micro-Celebrations

Feminine, class identity

Feminine identity includes partying

Feminine, class identity

Gatherings Birthdays Engagements School Reunions Christmas Soirées & really Great Parties!

Website

com.au

what's on

Inquire about holding your SPECIAL EVENT at

The image displays two examples of venue advertisements. The top advertisement is for a Mexican-themed event titled "GOING BACK TO MEXICO with [redacted] Jugs of Margaritas & Burritos". It features silhouettes of people drinking against a sunset background. Annotations point to "Alcohol promotions" (referring to the drinks) and "Music, entertainment" (referring to the band). The event is held "EVERY SUNDAY between 3.30 - 7.30pm" and includes "TEQUILA" and a "BAND". The bottom advertisement is for the "MELBOURNE CUP" on Tuesday, 1 November 2011, set against a background of the Melbourne skyline and a bridge. It promotes "prancing mares, frisky stallions, and the thrill of the chase...". Annotations point to "Celebrating wider cultural events" (referring to the Melbourne Cup) and "Connotations of gender roles played out in sexual and social interactions" (referring to the event's theme). The advertisement lists two packages: "CUP PARTY Package \$125.00pp" and "CUP LUNCH Package \$175.00pp (reserved seating)". It also includes a "FOR BOOKINGS & FURTHER DETAILS" section with a link to "SPECIAL EVENTS BOOKING" and a "Tickets are on sale now!" banner. Navigation links at the bottom include "WHAT'S ON", "GALLERY", "NEWSLETTER", "BOOKING ENQUIRY", "CLICK HERE FOR SPECIAL EVENTS BOOKING!", "BARS & RESTAURANTS", and "WHAT'S ON".

GOING BACK TO MEXICO
with [redacted]
Jugs of Margaritas & Burritos
EVERY SUNDAY between 3.30 - 7.30pm
TEQUILA [redacted] & BAND
every SAT from 5pm & SUN from 3.30 - 7.30pm

Alcohol promotions

Music, entertainment

MELBOURNE CUP
TUESDAY - 1 NOVEMBER 2011
prancing mares, frisky stallions, and the thrill of the chase...
• CUP PARTY Package \$125.00pp
• CUP LUNCH Package \$175.00pp (reserved seating)
FOR BOOKINGS & FURTHER DETAILS
Click on the 'SPECIAL EVENTS BOOKING' link on the bottom left of this page, or go to: [redacted]
Tickets are on sale now!

Celebrating wider cultural events

Connotations of gender roles played out in sexual and social interactions

With bars & restaurants planted squarely at the centre of Brisbane's business community, [redacted] caters to local professionals, tourists & travellers, the young & young at heart.

WHAT'S ON
GALLERY
NEWSLETTER
BOOKING ENQUIRY
CLICK HERE FOR SPECIAL EVENTS BOOKING!

« WHAT'S ON

BARS & RESTAURANTS »

Appendix H: Study 1 – Examples of Venue Advertisements attracting Students and Backpackers



Music &
Entertainment

Feminine identity

Cultural
reasons to party

Sexualised
female roles
represented

Interaction with media/
Social networking sites



Venue name & Akubra
hat as symbols for
Australian National
Identity

Appendix I – Study 2 – Credibility and Transferability of Interview Methods

Four main measures identified by Lincoln and Guba (1985) to increase trustworthiness of findings were: credibility, transferability, dependability, and confirmability. Adherence to these criteria in this study was addressed in the following ways:

Credibility

Credibility was enhanced through:

- (a) the first author having prolonged engagement and being an insider (Morse, 1994) with prior knowledge of Australian culture and alcohol consumption within it. As a woman living in Australia since childhood, the author has an understanding and experience of Australian culture and its relationship to alcohol. Complying with Patton's (2002) recommendations, the first author's personal history allowed her to reflect upon her own experience and realise the need to be aware of biases as she conducted and analysed the research. For instance, some stories in the interviews resonated with some of her history and thus, she needed to be aware of her own bias in interpretations. However, the subjective element in this case may have enhanced the communication with the women being interviewed.
- (b) developing trust through rapport-building, empathetic responses and active listening;
- (c) assurance of confidentiality;
- (d) member checking throughout the interviews by: asking for further information when appropriate; clarifying complex interview discussions; and reflecting and summarizing the main points at appropriate times during the interview;
- (e) acknowledgment of researcher bias through reflexivity, specifically a reflexive journal was kept by the first author and open conversations regarding potential bias occurred between all authors.

Transferability

Thick description of the participants' responses/voices were provided. Most of the women provided full and rounded narratives about their and other's drinking behaviour embedded in many tales from their personal experiences. A number of women said at the end of the interview that they had never thought so deeply about their alcohol-related thoughts and behaviours and what might be influencing them. Some women described gaining insight into their drinking as a result of their discussions with the interviewer.

Dependability

- (a) Feedback from pilot interviews enabled adaptation of the interviews as needed
- (b) All interviews were conducted in the same manner by the first author but evolved with the individual conversations that took place;
- (c) The main analysis was conducted by the first author who had also conducted the interviews, but with regular peer debriefing and input from other research team members who helped to challenge and clarify interpretations of the interviews.

Confirmability

- (a) An audit trail was kept to explain how the findings were obtained through ongoing notes and the reflexive journal.
- (b) Peer debriefing was conducted throughout the research stages (e.g., construction of interview questions, recruitment; data analysis).

Appendix J – Study 3 – Questionnaire for the Main Survey

About the women's drinking behaviour project

We are conducting research looking at alcohol consumption by women 18 years of age **and above** who are living in Australia. Specifically, we are researching a range of alcohol consumption, not just problematic drinking. While males drink more frequently and in greater quantities than females, data from The Australian Bureau of Statistics, 2012, revealed that both younger and older women were starting to consume alcohol at risky or high-risk levels. While studies show that women's drinking (alcohol) is widespread and occurring at increasingly harmful levels, there is as yet little research examining the cultural and social influences on women's drinking. By exploring the place of alcohol in women's lives, and the factors that influence its consumption, the current research is a step in understanding women's drinking patterns.

What do we mean by 'Drinking'?

Drinking is the term we will use throughout this questionnaire to refer to consuming alcohol. Drinking does NOT necessarily mean getting drunk, but will be used in one of three ways as defined below.

What do we mean by a Standard Drink?



Adapted from Queensland Health Standard Drink Guide
http://www.health.qld.gov.au/cdg/docs/cdg_drink_guide.pdf

3 Definitions of drinking:

Two definitions of drinking will be used in this questionnaire:

1. Drinking in general, so this could mean occasional Drinking of one or two standard alcoholic beverages every few months or every week.
2. Drinking an alcoholic drink more than 5 days per week. (So for example, drinking one glass of wine per night, each night would be included in this definition.)
3. Drinking more than 4 standard drinks per drinking occasion. (So for example, drinking a bottle of wine or 3 large cocktails on a Friday or Saturday night.)

Your participation

Your participation involves completing 2 surveys (If you would prefer a paper version please email the principal researcher at hm.haydon@qut.edu.au). The first survey will take approximately 30 minutes to complete and is designed to assess your opinions about drinking alcohol. The second survey will be sent two weeks later and takes less than 5 minutes to complete. It would be greatly appreciated if you completed both surveys. For each of the survey questions please select the number that best represents your responses. The survey is about your beliefs and attitudes and therefore there is **no right or wrong answer**. Your answers are all **confidential**. We are interested in what you think about the following:

1. Your attitudes and beliefs about women's drinking in general and about your own drinking.
2. The things that might stop you from drinking alcohol.
3. The things that might make increase your drinking.
4. Your actual alcohol consumption.

Are you eligible to complete this survey?

To be eligible to complete this survey, you must meet the following criteria. Please tick the relevant boxes to confirm your eligibility.

- | | |
|---------------------------|--|
| 1. I am female | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. I am over 18 years old | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. I live in Australia | <input type="checkbox"/> Yes <input type="checkbox"/> No |

If you answered 'yes' to all questions, please proceed to the survey.

If you were not able to answer 'yes' to all three questions, you are not eligible to complete the survey. Thank you for your time.

Your Code Identifier

A code identifier helps to keep your identity confidential, but allows us to match two surveys together, so that the research team can match and analyse two surveys that are completed by the same person, but without knowing who completed the surveys. **Please put the appropriate letter or number in the left hand column below.**

| | |
|--|--|
| | What is the first letter of your first name? |
| | What is the third letter of your first name? |
| | What is the first letter in your mother's first name? |
| | What is the date of the month that you were born on? (e.g., the 21 st) |

For example, imagine that Charlotte Brown is filling out the questionnaire. Her mother's name is Anne. Charlotte was born on the 31st of December. Her code identifier would be:

| | | | |
|---|---|---|----|
| C | A | A | 31 |
|---|---|---|----|

Section A: Information about you. (Remember all answers are strictly confidential. These questions are not intended to identify you in any way, but inform us of who is participating in the surveys.)

Sociodemographic information

Current Age: _____ (years)

Country of birth: _____

If you were NOT born in Australia, what year did you arrive to live here? _____

Which state/ territory do you currently live in? [Drop down Menu]

What is the postcode of your primary place of residence? _____

Is English your first language? ☐ Yes ☐ No

Do you identify as an Aboriginal and/or Torres Strait Islander woman? ☐ Yes ☐ No

Q1: What is your marital status?

- ☐ Never married
- ☐ Married/Defacto
- ☐ Divorced
- ☐ Widowed

Q2: What is your highest education level attained?

- ☐ Primary school
- ☐ High school/ Secondary school
- ☐ Technical/trade certificate/ Diploma
- ☐ University - undergraduate degree
- ☐ University - postgraduate degree

Q4: What is your gross weekly household income (i.e., pre-tax) in Australian dollars [Annual estimates]?

- ☐ 0 -\$99 [0-5200pa]
- ☐ 100-400 [5200-20800]
- ☐ 401-800 [20 800-41 600]
- ☐ 801-1200 [41 600-62 400]
- ☐ 1201-1600 [62 400-83 200]
- ☐ 1601-2000 [83 200 –104 000]
- ☐ 2001-3000 [104 000-156 000]
- ☐ 3001+ [156 000 +]

Section B: Information about your drinking. (Remember that all answers are strictly confidential.) *the AUDIT (Alcohol Use Disorders Identification Test)*

Q5. How often do you have a drink containing alcohol?

- Never
- Monthly or less
- 2-4 times a month
- 2-3 times a week
- 4 or more times a week

Q6. How many standard drinks containing alcohol do you have on a typical day when drinking?

- 1 or 2
- 3 or 4
- 5 or 6
- 7 to 9
- 10 or more

Q7. How often do you have six or more drinks on one occasion?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q8. How often do you have five or more drinks on one occasion?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q9. During the past year, how often have you found that you were not able to stop drinking once you had started?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q10. During the past year, how often have you failed to do what was normally expected of you because of drinking?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q11. During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q12. During the past year, how often have you had a feeling of guilt or remorse after drinking?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q13. During the past year, have you been unable to remember what happened the night before because you had been drinking?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

Q14. Have you or someone else been injured as a result of your drinking?

- No
- Yes, but not in the past year
- Yes, during the past year

Q15. Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?

- No
- Yes, but not in the past year
- Yes, during the past year

Section C: Your opinions and beliefs about alcohol and what may influence your drinking. (Remember that all answers are strictly confidential.)

Q16: Thinking about times when you drink alcohol and any patterns in your thoughts or actions around drinking...(For this question drinking refers to having one standard drink or more)

(Please circle the appropriate number on each row)*Exosystem*

| Do you agree that... | strongly disagree | disagree | somewhat disagree | agree nor disagree | disagree somewhat | agree | agree strongly | agree |
|---|----------------------|----------|----------------------|-----------------------|----------------------|-------|-------------------|-------|
| <i>Implicit versus Awareness of alcohol</i> | | | | | | | | |
| Watching how some people drink alcohol has made me aware of how harmful it can be. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Drinking alcohol is such a natural part of my life that I hardly think about it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| In certain situations, I don't really think about it, but just assume that I am going to have an alcoholic drink. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Every single time I have a drink it is a very thought-out conscious decision. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I sometimes feel like alcohol is everywhere. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

Identity

| | | | | | | | | |
|---|---|---|---|---|---|---|---|--|
| I think of myself as a drinker | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I am the type of person who enjoys a drink. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I am the type of person who doesn't mind getting a bit drunk. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I think of myself as fun because I have a few drinks. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

SECTION D: Different ways that people drink alcohol *TPB questions*

D1 – This section is about drinking when it is drinking one or two drinks occasionally. So that may be if you have a glass of wine or two every week, or it may be that you have a champagne only on special occasions.

Q17: I think drinking one or two drinks occasionally (e.g. a glass or two of wine every week) would be...

(please circle the appropriate number on each row) *Attitudes (Instrumental & Experiential)*

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|-----------------|
| Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Bad |
| Unpleasant | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Pleasant |
| Helpful | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhelpful |
| Healthy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhealthy |
| Easy to Do | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Difficult to Do |
| Fun | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Boring |

Q18: Thinking about drinking 1 or 2 drinks occasionally (e.g. a glass of wine or two every week or every fortnight) . *Subjective Norm*

(Please circle the appropriate number on each row)

| Do you agree that... | strongly disagree | disagree | somewhat agree | neutral | somewhat agree | agree | strongly agree |
|---|----------------------|----------|-------------------|---------|-------------------|-------|-------------------|
| Most people who are important to me would <u>approve</u> of me drinking 1 or 2 drinks occasionally | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that I <u>should</u> drink 1 or 2 drinks occasionally | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that my drinking 1 or 2 drinks occasionally would be <u>desirable</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Q19: Thinking about drinking 1 or 2 drinks occasionally (e.g. a glass of wine or two every week or fortnight)...

(Please circle the appropriate number on each row) *Perceived Behavioural Control*

| Do you agree that... | strongly disagree | disagree | somewhat disagree | agree nor somewhat | agree | agree strongly | agree |
|---|----------------------|----------|----------------------|-----------------------|-------|-------------------|-------|
| If I wanted to I could stop drinking alcohol completely. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am confident that I could stop drinking completely | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I have complete control over whether or not I drink alcohol | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| It is mostly up to me whether or not I drink alcohol | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| It is easy for me to not drink alcohol | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Q20: Thinking about drinking 1 or 2 drinks occasionally...

Intention

| Do you agree that in the next 2 weeks... | Strongly disagree | disagree | Somewhat disagree | agree or neutral | disagree slightly | agree | agree | Strongly agree |
|---|-------------------|----------|-------------------|------------------|-------------------|-------|-------|----------------|
| It is likely that I will engage in drinking 1 or 2 drinks occasionally. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I intend to drink 1 or 2 drinks occasionally. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I plan to drink 1 or 2 drinks occasionally. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| I never intend to drink 1 or 2 drinks occasionally, but I usually end up doing so | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

D2 – This section is about drinking 6 or more days in the one week. So that may be if you have a glass of wine or a beer most nights in a particular week. It may be that some weeks you have hardly any, but some weeks you have alcohol almost every day.

Q21: I think drinking 6 or more days per week (e.g. a glass or two of wine a night) would be...

(Please circle the appropriate number on each row) *Attitudes (Instrumental & Experiential)*

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|-----------------|
| Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Bad |
| Unpleasant | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Pleasant |
| Helpful | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhelpful |
| Healthy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhealthy |
| Easy to Do | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Difficult to Do |
| Fun | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Boring |

Q22: Thinking about drinking 6 or more days per week (e.g. a glass or two of wine a night)

(Please circle the appropriate number on each row) *Subjective Norm*

| Do you agree that... | strongly disagree | disagree | somewhat agree | neutral | somewhat agree | agree | strongly agree |
|--|----------------------|----------|-------------------|---------|-------------------|-------|-------------------|
| Most people who are important to me would <u>approve</u> of me drinking 6 or more days per week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that I <u>should</u> drink 6 or more days per week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that my drinking 6 or more days per week would be <u>desirable</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Q23: Thinking about drinking 6 or more days per week (e.g. a glass or two of wine most nights)...

(Please circle the appropriate number on each row) *Perceived Behavioural Control*

| Do you agree that... | strongly disagree | disagree | somewhat disagree | neither agree nor disagree | somewhat agree | agree | strongly agree |
|--|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| It would be easy for me to <u>not</u> drink 6 or more days in a week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am confident that I could limit my drinking to less than 6 days per week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I have complete control over whether or not I drink 6 or more days per week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| It is mostly up to me whether or not I drink 6 or more days per week | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I wanted to I could <u>always</u> limit my drinking to less than 6 days per week. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Q24: Thinking about drinking 6 or more days per week...

Intention

| Do you agree that in the next 2 weeks... | Strongly disagree | disagree | Somewhat disagree | neither agree or disagree | slightly agree | agree | Strongly agree |
|---|-------------------|----------|-------------------|---------------------------|----------------|-------|----------------|
| It is likely that I will engage in drinking on 6 or more days in a typical week. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I intend to drink more than 5 days in a typical week. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I plan to drink more than 5 days in a typical week. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I never intend to drink more than 5 days in a week, but somehow I end up doing so | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

D3 – This section is about drinking 5 or more standard alcoholic drinks on any one occasion. For instance it could be when you drink 5 glasses of champagne at a barbecue or dinner party; or perhaps 5 cocktails on a Friday night.

Q25: I think drinking 5 or more standard alcoholic drinks on any one occasion would be ...

(Please circle the appropriate number on each row) *Attitudes (Instrumental & Experiential)*

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|-----------------|
| Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Bad |
| Unpleasant | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Pleasant |
| Helpful | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhelpful |
| Healthy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unhealthy |
| Easy to Do | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Difficult to Do |
| Fun | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Boring |

Q26: Thinking about drinking 5 or more standard drinks on any one occasion ... *Subjective Norm*

(Please circle the appropriate number on each row)

| Do you agree that... | strongly disagree | disagree | somewhat agree | neutral | somewhat agree | agree | strongly agree |
|---|-------------------|----------|----------------|---------|----------------|-------|----------------|
| Most people who are important to me would <u>approve</u> of me drinking 5 or more drinks on any one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that I <u>should</u> drink 5 or more drinks on any one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Most people who are important to me would think that my drinking 5 or more drinks on any one occasion would be <u>desirable</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Q27: Of the times that you decide to drink alcohol...Thinking about drinking 5 or more standard drinks on any one occasion...

(Please circle the appropriate number on each row) *Perceived Behavioural Control*

| Do you agree that when/ if you decide to drink alcohol... | strongly disagree | disagree | somewhat disagree | neither agree nor disagree | somewhat agree | agree | strongly agree |
|--|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| It would be easy for me to always limit my drinking to less than 5 standard drinks on one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am confident that I could drink less than 5 standard drinks on one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I have complete control over whether or not I drink 5 or more standard drinks on one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| It is mostly up to me whether or not I drink 5 or more drinks on one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I wanted to I could always limit my drinking to less than 5 drinks per occasion. | | | | | | | |

Q28: Thinking about drinking more than 4 drinks on one occasion

Intention

| Do you agree that in the next 2 weeks... | Strongly disagree | disagree | Somewhat disagree | neither agree or disagree | slightly agree | agree | Strongly agree |
|---|-------------------|----------|-------------------|---------------------------|----------------|-------|----------------|
| It is likely that I will drink more than 4 drinks on any one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I intend to drink more than 4 drinks on one occasion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I plan to drink more than 4 drinks on one occasion. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| On the weekend I plan to drink as much as I can without spending too much money | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I never intend to drink more than 4 drinks in an evening, but somehow I end up doing so | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Thank you very much for completing this survey.

We will be in contact with you again in two week's time regarding the second, brief survey (which will take you no longer than 5 minutes to complete). If you would prefer to complete Survey Two in a **paper-based** version, please contact Helen Haydon on 07 3138 4926 this can be arranged.

Please provide us with an email address so that Survey Two can be sent to this email address. Please note that your email address is on a separate page to your survey responses and will be stored separately from the surveys to ensure your anonymity.

Please provide your email address so that we can send you the final 5 minute survey:

_____ @ _____

Today's Date: _____

Please note:

If you wish to go into the prize draw to win one of six \$50 Coles/ Myer vouchers please provide your email address again on the next page.

OR Tick ☐ YES, I am happy to use the email address above for the prize draw

Your address will be kept separate to your responses. Once you have completed Survey

For further information about where to go for help or if someone you know has problems with alcohol please see the link below.

PDF of Useful Numbers & Websites

Prize Draw Entry One

Please provide us with a preferred email address and/or phone number if you would like to enter the prize draw to win one of six Coles/ Myer shopping vouchers:

Thank you!

Appendix K – Study 3 – Follow-Up Questionnaire

About this women's drinking behaviour project

We are conducting research looking at alcohol consumption by women 18 years of age **and above** living in Australia. Specifically, we are researching a range of alcohol consumption, not just problematic drinking. While males drink more frequently and in greater quantities than females, data from The Australian Bureau of Statistics, 2012, revealed that both younger and older women were starting to consume alcohol at risky or high-risk levels. While studies show that women's drinking (alcohol) is widespread and occurring at increasingly harmful levels, there is as yet little research examining the cultural and social influences on women's drinking. By exploring the place of alcohol in women's lives, and the factors that influence its consumption, the current research is a step in understanding women's drinking patterns.

What do we mean by a Standard Drink?



Adapted from Queensland Health Standard Drink Guide
http://www.health.qld.gov.au/cdg/docs/cdg_drink_guide.pdf

Your participation

This is the second and final survey that has 3 questions about your ACTUAL drinking behaviour in the past 2 weeks. This survey will take less than 5 minutes to complete. It would be greatly appreciated if you completed this final survey. There is **no right or wrong answer** and your answers are all **confidential**.

Are you eligible to complete this survey?

To be eligible to complete this survey, you must have completed the first survey approximately two weeks ago.

Your Code Identifier

So that we can match up this survey's responses with the previous responses please complete the code identifier as you did on Survey 1. Please put the appropriate letter or number in the left hand column below.

| | |
|--|---|
| | What is the first letter of your first name? |
| | What is the third letter of your first name? |
| | What is the first letter in your mother's first name? |
| | What is the date of the month that you were born on? (e.g. the 21 st) |

For example, imagine that Charlotte Brown is filling out the questionnaire. Her mother's name is Anne. Charlotte was born on the 31st of December. Her code identifier would be:

| | | | |
|---|---|---|----|
| C | A | A | 31 |
|---|---|---|----|

Section A: Information about you. (Remember all answers are strictly confidential.)

Current Age: _____ (years)

Country of birth: _____

What is the postcode of your primary place of residence? _____

Q1: In the last 2 weeks, on how many days did you have a drink containing alcohol?

| | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|---------------|
| 0/None | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14/ Every Day |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|---------------|

Q2: In the last 2 weeks if you drank alcohol, how many standard alcoholic drinks did you have on a typical drinking occasion?

| | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|------------|
| 0/None | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 or More |
|--------|---|---|---|---|---|---|---|---|---|------------|

Q3: In the last 2 weeks how often did you have 5 or more standards drinks on any one occasion?

| | | | | | |
|-----------|----------|-----------|---------|---------|-----------------|
| Never - 0 | Once - 1 | Twice - 2 | 3 times | 4 times | 5 or more times |
|-----------|----------|-----------|---------|---------|-----------------|

Q4: In the last 2 weeks how often did you have 6 or more standards drinks on any one occasion?

| | | | | | |
|-----------|----------|-----------|---------|---------|-----------------|
| Never - 0 | Once - 1 | Twice - 2 | 3 times | 4 times | 5 or more times |
|-----------|----------|-----------|---------|---------|-----------------|

Thank you very much for completing this survey.

Prize Draw Entry Two

Please provide us with a preferred email address and/or phone number if you would like to enter the prize draw to win one of six \$50 Coles/ Myer shopping vouchers:

Thank you!

Appendix L – Study 3 – Bivariate Correlations for Variables used in the Extended TPB Analysis

Table L1.

Bivariate correlations for variables examining frequent drinking (6 or more days per week)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------|---|---------|---------|----------|----------|---------|---------|----------|----------|
| 1. Intention | - | .431*** | .368*** | -.515*** | .244*** | .108*** | .108*** | -.296*** | .172*** |
| 2. Attitude | | - | .450*** | -.230*** | .086** | .054 | .086** | -.445*** | .398*** |
| 3. Subjective Norm | | | - | -.245*** | .117*** | .061* | .029 | -.207*** | .159*** |
| 4. PBC | | | | - | -.156*** | -.058 | -.070* | .202*** | -.178*** |
| 5. Age | | | | | - | .361*** | .303*** | -.006 | -.178*** |
| 6. Education | | | | | | - | .375*** | -.047 | -.038 |
| 7. Income | | | | | | | - | -.119*** | .075* |
| 8. Awareness | | | | | | | | - | -.633*** |
| 9. Self-Identity | | | | | | | | | - |

*** $p < .001$ ** $p < .01$ ***^a $p = .001$ * $p < .05$

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Table L2.

Bivariate correlations for variables examining binge drinking (5 or more standard drinks on one occasion)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------|---|---------|---------|----------|----------|----------|----------|----------|----------|
| 1. Intention | - | .667*** | .489*** | -.451*** | -.354*** | -.197*** | -.137*** | -.429*** | .595*** |
| 2. Attitude | | - | .537*** | -.354*** | -.345*** | -.172*** | -.055 | -.430*** | .641*** |
| 3. Subjective Norm | | | - | -.253*** | -.271*** | -.159*** | -.089** | -.261*** | .377*** |
| 4. PBC | | | | - | .126*** | .052 | .020 | .371*** | -.417*** |
| 5. Age | | | | | - | .361*** | .303*** | -.006 | -.178*** |
| 6. Education | | | | | | - | .375*** | -.047 | -.038 |
| 7. Income | | | | | | | - | -.119*** | .075* |
| 8. Awareness | | | | | | | | - | -.633*** |
| 9. Self-Identity | | | | | | | | | - |

*** $p < .001$ ** $p < .01$ ***^a $p = .001$ * $p < .05$

Table L3.

Bivariate correlations for the variables used in the logistic regressions

| Variable | | 1 | 2 | 3 | 4 | 5 | 6 |
|----------|--------------------------|---|----------|----------|----------|----------|----------|
| Frequent | 1. Intentions – Frequent | - | -.522*** | .553*** | .160*** | -.211*** | .194*** |
| | 2. PBC – Frequent | | - | -.350*** | -.119**a | .438*** | -.155*** |
| | 3. Frequent Drinking | | | - | .067 | -.137*** | .188*** |
| Binge | 4. Intentions - Binge | | | | - | -.464*** | .538*** |
| | 5. PBC - Binge | | | | | - | -.338*** |
| | 6. Binge Drinking | | | | | | - |

*** $p < .001$ ** $p < .01$ ***^a $p = .001$ * $p < .05$